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BULLETIN No. 130-74

HYDROLOGIC DATA: 1974

Volume I: NORTH COASTAL AREA

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DECEMBER 1975

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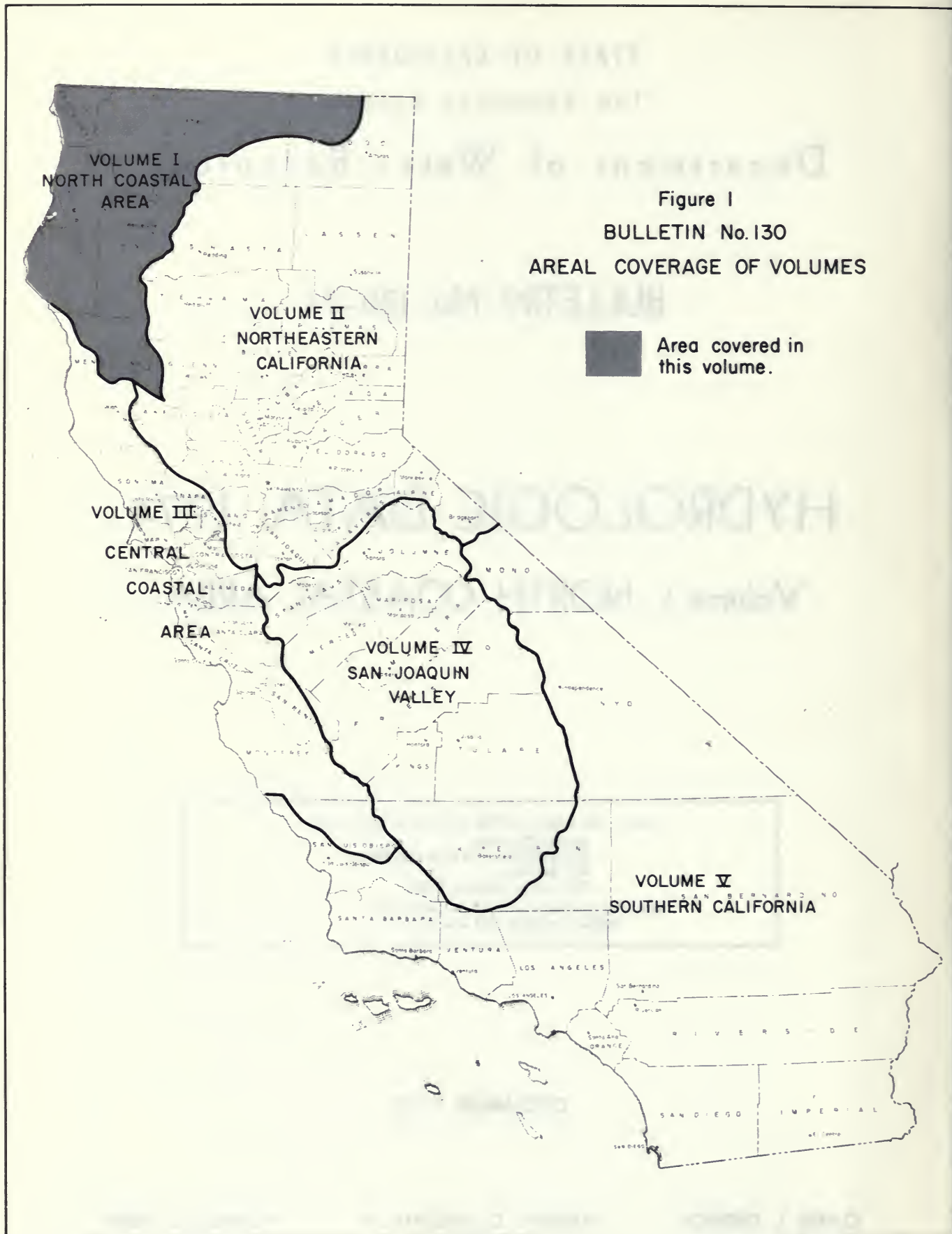


Figure 1

BULLETIN No.130

AREAL COVERAGE OF VOLUMES

UNIVERSITY OF CALIFORNIA

Department of Water

Division of Water

BULLETIN No. 130

HYDROLOGICAL

Volume I

FOREWORD

The hydrologic data programs of the Department of Water Resources supplement the data collection activities of other agencies and help satisfy the needs for data on the quality and quantity of water in the State. Bulletin No. 130-74 presents accurate, comprehensive, and timely hydrologic data which provide a more complete knowledge of the factors affecting our environment and are prerequisites for effective planning and operation of water facilities.

The Bulletin No. 130 series is published annually in five volumes. Each volume presents hydrologic data for one of five reporting areas of the State. These areas are delineated on the map on the opposite page.

Volume I contains data on climate, surface water flow, ground water levels, and surface and ground water quality in the North Coastal Area for the 1973-74 water year. Figures show hydrographic unit boundaries; ground water basins; and the location of climatological observation, surface water measurement, and surface water quality sampling stations.



Ronald B. Robie, Director
Department of Water Resources
The Resources Agency
State of California

CONVERSION FACTORS

English to Metric System of Measurement

<u>Quantity</u>	<u>English unit</u>	<u>Multiply by*</u>	<u>To get metric equivalent</u>
Length	inches (in)	25.4	millimetres (mm)
		.0254	metres (m)
	feet (ft)	.3048	metres (m)
	miles (mi)	1.6093	kilometres (km)
Area	square inches (in ²)	6.4516 × 10 ⁻⁴	square metres (m ²)
	square feet (ft ²)	.092903	square metres (m ²)
	acres	4046.9	square metres (m ²)
		.40469	hectares (ha)
		.40469	square hectometres (hm ²)
		.0040469	square kilometres (km ²)
	square miles (mi ²)	2.590	square kilometres (km ²)
Volume	gallons (gal)	3.7854	litres (l)
		.0037854	cubic metres (m ³)
	million gallons (10 ⁶ gal)	3785.4	cubic metres (m ³)
	cubic feet (ft ³)	.028317	cubic metres (m ³)
	cubic yards (yd ³)	.76455	cubic metres (m ³)
	acre-feet (ac-ft)	1233.5	cubic metres (m ³)
		.0012335	cubic hectometres (hm ³)
	1.233 × 10 ⁻⁶	cubic kilometres (km ³)	
Volume/Time (Flow)	cubic feet per sec (ft ³ /s)	28.317	litres per second (l/s)
		.028317	cubic metres per sec (m ³ /s)
	gallons per minute (gal/min)	.06309	litres per second (l/s)
		6.309 × 10 ⁻⁵	cubic metres per sec (m ³ /s)
	million gallons per day (mgd)	.043813	cubic metres per sec (m ³ /s)
Water Usage	acre-feet per acre	.3048	cubic metres per square metre (m ³ /m ²)
Mass	pounds (lb)	.45359	kilograms (kg)
	tons (short, 2,000 lb)	.90718	tonne (t)
		907.18	kilograms (kg)
Power	horsepower (hp)	0.7460	kilowatts (kW)
Pressure	pounds per square inch (psi)	6894.8	pascal (Pa)

* For greater accuracy, use conversion factors in "Metric Practice Guide" (American Society for Testing and Materials, E 380-72).

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APPENDIX F: WASTE WATER DATA, which appeared in certain volumes of the Bulletin No. 130 series, has been discontinued. For information regarding waste water, the reader is referred to the recently reactivated Bulletin No. 68 series: "Inventory of Waste Water Production and Waste Water Reclamation Practices in California".	

ABSTRACT

The report contains tables showing data on surface water flow, ground water levels, and surface and ground water quality in the North Coastal area during the 1973-74 water year. Figures show the location of climatological stations, surface water measurement stations, surface water sampling stations, and ground water basins.

ACKNOWLEDGMENTS

Valuable assistance and contributions were received from several agencies and many private cooperators. The cooperation of the National Weather Service (formerly the U. S. Weather Bureau) and the U. S. Geological Survey was particularly helpful and is gratefully appreciated.

A special note of thanks is extended to the many loyal and dedicated weather observers whose unselfish efforts have contributed immeasurably to our knowledge of historical weather conditions in the North Coastal area.

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CLIMATOLOGICAL OBSERVATION STATIONS

APPENDIX A

CLIMATOLOGICAL DATA

TABLE A-1

PRECIPITATION IN NORTH COASTAL AREA
DURING WATER YEAR 1973

Table A-1 summarizes monthly precipitation totals for selected stations for the 1974 water year, October 1, 1973, through September 30, 1974. The table shows stations by assigned number, name, and county. Location is defined by latitude and longitude in degrees to the third decimal, and stations are located on the map on the preceding page.

Precipitation values are shown to the nearest hundredth (.01) of an inch. Where digital recording rain gages are used, a zero is shown in the second decimal place, even though these instruments record to only the nearest tenth (.1) of an inch. The following notations are used to qualify the values:

- No record or incomplete record
- B Record began
- E Wholly or partially estimated
- N Record ends
- T Trace, an amount too small to measure

Precipitation data collected by the National Weather Service and local observers and cooperators in the North Coastal area are available in greater detail in other reports. The National Weather Service publishes a report entitled "Climatological Data for California" and a companion volume, "Hourly Precipitation Data". Department of Water Resources Bulletin No. 165, "Climatological Stations in California, 1971, Indexed by County", contains station information on both active and historical precipitation measurement stations.

In addition, evaporation data and daily climatologic data, including temperatures, together with local conditions and qualifying remarks, are available in the files of the Department of Water Resources.

The county codes (CO) used in Table A-1 are shown below:

<u>County</u>	<u>Code</u>
Del Norte	08
Glenn	11
Humboldt	12
Lake	17
Mendocino	23
Modoc	25
Siskiyou	47
Trinity	53

PRECIPITATION IN NORTH COASTAL AREA DURING WATER YEAR 1974

CO	STA NO	LAT	LONGIT	ELEV	STATION NAME	TOTAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
12	F6 008000	40.183	123.600	435	ALDERPOINT	.00-	5.18	20.13	.00-	.00-	.00-	.00-	.00-	.25	.92	0.47	0.50	0.00
12	F5 025300	40.971	124.089	217	ARCATA A P	69.98	5.39	22.36	11.23	8.55	6.75	9.30	4.65	.71	.83	0.15	0.05	0.01
47	F2 078601	41.591	122.328	2955	BIO SPRINGS 4 E	13.10	3.07	2.02	1.35	1.76	.50	1.22	1.62	.00	.33	0.33	0.10	0.00
23	F6 104600	39.686	123.660	1480	BRANSCOMB 2 NW	127.93	8.14	33.06	16.89	21.94	11.99	23.66	8.68	.15	.45	1.83	0.34	0.00
12	F6 108000	40.516	123.816	2050	BRIDGEVILLE 4 NNW	104.29	8.99	29.97	18.52	15.11	10.27	14.07	5.58	.60	.15	0.55	0.48	0.00
	F6 108400					.00-	6.40	22.70	.00-	.00-	.00-	10.50	3.40	.50	.40	0.30	0.40	0.00
12	F6 118100	40.350	124.108	410	BULL CREEK	122.75	5.84	34.71	20.66	24.61	11.04	18.31	5.50	.56	.54	0.45	0.45	0.00
12	F6 121000	40.300	123.966	200	BURLINGTON ST PARK	107.60	6.49	32.40	15.94	21.32	9.82	14.39	4.21	.39	1.14	0.82	0.68	0.00
53	F4 121500	40.794	123.479	2150	BURNT RANCH 1S	68.00	6.61	17.54	12.36	8.82	7.30	10.26	3.74	.29	.53	0.42	0.05	0.00
12	F3 123300	40.766	123.900	420	BUTLER VALLEY RANCH	73.49	7.14	19.16	11.64	8.25	9.79	16.12	5.95	.29	.29	0.10	0.12	0.00
47	F2 131600	41.300	122.000	3136	CALLAHAN RANGER STA	29.36	3.40	5.48	4.00	6.66	2.23	4.16	1.81	.14	.70	0.51	0.27	0.00
47	F3 160600	41.100	123.050	2980	CECILVILLE 5 SE	.00-	5.26	.00-	.00-	.00-	.00-	.00-	2.97	.56	.63	0.82	0.80	0.00-
47	F3 179900	41.708	123.448	975	CLEAR CREEK	100.51	5.21	26.83	18.12	17.05	10.41	13.89	4.85	.04	.11	0.20	0.00	0.00-
53	F4 186600	41.083	122.700	2500	COFFEE CREEK RS	.00-	7.10	.00-	11.60	18.00	7.60	15.10	4.10	.10	1.20	2.30	0.30	0.00
47	F3 199000	41.983	122.333	2700	COPCO DAM NO 1	24.54	2.94	6.04	3.10	4.07	2.40	2.92	2.50	.08	.00	0.30	0.20	0.00
23	F6 208100	39.783	123.250	1385	COVELO	62.38	5.54	15.00	8.73	11.03	4.77	11.75	3.85	.27	.50	0.85	0.06	0.00
23	F6 208400	39.833	123.083	1514	COVELO EEL RIVER RS	.00-	.00-	15.10	8.50	.00-	6.10	10.10	2.30	.50	.08	0.90	0.00	0.00
08	F0 214700	41.766	124.200	40	CRESCENT CITY 1 N	93.81	6.07	31.25	14.68	12.37	11.06	12.82	3.20	.75	.85	0.68	0.68	0.00
08	F0 214800	41.800	124.083	120	CRESCENT CITY 7 ENE	123.20	7.98	41.72	21.81	14.61	14.19	14.42	6.10	.94	.85	0.83	0.03	0.00
08	F0 215000	41.766	124.200	50	CRESCENT CITY MMS	.00-	6.90	.00-	.00-	13.30	9.20	13.40	3.50	.70	1.00	0.80	0.00	0.00
08	F0 215200	41.755	123.991	360	CRESCENT CITY 11 E	159.38	10.48	50.39	26.59	23.39	18.10	19.95	7.24	2.10	.51	0.63	0.00	0.00
23	F6 221000	39.833	123.633	1270	CUMMINGS	114.87	8.19	30.56	15.08	21.55	10.86	20.51	6.30	.21	.35	1.10	0.16	0.00
47	F1 248000	41.955	121.988	4240	DORRIS INSPECT STA	19.66	2.27	4.31	1.67	1.75	1.20	3.14	1.23	.16	.34	1.12	0.67	0.00
08	F0 274900	42.000	123.710	1711	ELK VALLEY	.00-	6.98	39.59	23.33	17.05	13.98	15.99	.00-	2.07	.20	0.15	0.00	0.00
47	F2 289900	41.466	122.900	2912	ETNA	42.76	3.77	9.27	6.74	10.47	3.95	5.69	2.39	.06	.13	0.24	0.05	0.00
12	F6 291000	40.800	124.166	43	EUREKA WB CITY	51.05	4.14	16.50	7.02	6.02	5.98	6.90	3.15	.42	.33	0.11	0.32	0.00T
12	F5 304100	40.943	124.018	285	FIELDBROOK 4 D RCH	95.80	10.10	28.45	14.50	10.75	12.15	15.15	2.20	1.10	.80	0.60	0.00	0.00
00	F3 312200	41.811	122.371	2960	FOOTHILL SCHOOL	19.83	2.90	4.40	2.09	2.84	1.70	2.98	2.14	.14	.02	0.62	0.00	0.00
53	F4 313000	40.383	123.333	2340	FOREST GLEN	109.91	7.59	30.14	16.80	20.25	8.60	20.31	3.93	.35	.67	1.01	0.26	0.00
08	F0 317300	41.866	124.150	46	FORT DICK	105.74	6.89	34.45	18.13	14.01	12.22	13.11	4.56	.59	1.15	0.58	0.05	0.00
47	F2 317600	41.583	122.716	3324	FORT JONES 6 ESE	31.80	3.50	6.50	3.50	7.00	2.50	4.10	2.40	.30	.20	0.70	0.30	0.00
47	F2 318200	41.600	122.850	2720	FORT JONES RANGER ST	34.20	3.86	7.17	5.15	7.13	2.62	3.33	3.92	.05	.14	0.79	0.04	0.00
12	F6 319400	40.600	124.150	60	FORTUNA	63.92	3.95	19.30	8.30	9.36	7.60	5.40	5.72	.33	.36	0.88	0.52	0.00
12	F6 321700	40.306	124.065	2500	FOX CAMP	136.26	13.60	37.66	20.64	25.33	11.98	20.41	6.17	.47	.00	0.00	0.00	0.00
12	F6 323000	40.100	123.800	340	GARBERVILLE	90.84	6.83	24.31	13.84	19.30	7.96	13.06	4.29	.09	.86	0.45	0.65	0.00
12	F6 332201	40.100	123.794	540	GARBERVILLE MMS	91.90	6.81	26.50	12.11	19.44	7.67	12.54	4.43	.11	1.05	0.55	0.69	0.00
08	F0 335700	41.866	123.966	384	GASQUET RANGER STA	138.51	7.40	45.96	22.89	17.95	18.60	18.63	6.50	1.24	.47	0.79	0.00	0.00
47	F2 361400	41.550	122.900	2818	GREENVIEW	37.40	3.70	7.07	5.05	11.47	3.37	4.36	1.50	.00	.20	0.68	0.00	0.00
47	F3 378100	41.800	123.383	1698	HAPPY CAMP RANGR STA	86.80	7.34	22.17	15.64	15.71	9.88	11.49	4.19	.05	.13	0.20	0.00	0.00
23	F6 378500	39.989	123.611	1918	MARRIS T SSE	102.76	7.24	26.97	13.86	18.74	10.95	18.25	4.74	.48	.54	0.64	0.35	0.00
53	F4 385900	40.550	123.166	2340	HAYFORK RANGER STA	55.83	3.95	11.30	11.01	10.69	4.32	8.60	2.52	.30	.56	0.96	0.82	0.00
47	F3 398700	42.000	122.633	2908	HILTS	33.53	3.07	6.83	4.38	8.55	2.33	6.78	.87	.49	.05	0.18	0.00T	0.00
12	F4 408200	41.050	123.666	350	HOOPA	82.51	8.22	21.86	15.46	9.51	10.01	11.73	4.90	.37	.15	0.22	0.68	0.00
47	F4 408900					.00-	8.10	23.50	13.44	.00-	.00-	.00-	3.53	.00-	.00	0.20	0.00	0.00
53	F4 419100	40.616	123.466	1260	HYAMPON	.00-	4.20	15.44	10.84	.00-	.00-	8.55	1.72	.00	.30	0.24	0.08	0.00
08	F0 420200	41.900	123.769	1250	IDLEWILD MMS	121.40	6.55	36.87	19.39	19.05	13.98	17.55	6.50	1.01	.39	0.20	0.00	0.00
08	F3 457700	41.516	124.033	25	KLAMATH	113.99	8.74	35.30	20.81	12.75	12.26	15.02	7.34	.85	.57	0.53	0.02	0.00
12	F6 458700	40.633	123.900	2356	KNEELAND 10 SSE	.00-	8.14	25.05	12.68	8.90	.00-	21.43	4.51	.73	.28	0.17	0.30	0.00
12	F5 460200	40.866	123.958	150	KORBEL	68.12	5.19	19.19	9.92	6.37	7.39	8.31	5.47	.94	1.62	0.36	0.36	0.00
47	F1 483800	41.729	121.508	4770	LAVA BEDS NAT MON	18.55	2.69	3.41	1.75	3.01	1.15	4.42	1.48	.13	.02	1.03	0.47	0.00
23	F6 485100	39.700	123.483	1640	LAYTONVILLE	.00-	6.50	24.70	.00-	.00-	7.30	18.40	3.30	.20	.60	1.90	0.10	0.00
47	F2 498402	41.716	122.383	2725	LITTLE SHASTA	14.42	2.51	3.03	1.36	1.71	.99	2.95	1.12	.15	.32	0.82	0.36	0.00
53	F5 524400	40.450	123.533	2775	MAD RIVER RANGER STA	96.06	8.13	23.04	16.17	18.08	8.80	14.14	5.71	.37	.75	0.55	0.32	0.00
12	F6 571100	40.183	123.783	263	MIRANDA 4 SE	.00-	7.80	27.40	11.20	19.50	8.00	.00-	.00-	.00-	.00-	0.00-	0.00-	0.00-
12	F6 571300	40.200	123.766	400	MIRANDA SPENGLER RCH	.00-	7.18	24.34	10.41	17.68	7.46	.00-	.00-	.00-	1.05	0.35	0.50	0.00
47	F2 578300	41.728	122.526	2500	MONTAGUE	16.10	2.39	3.21	1.59	2.72	.78	2.07	2.27	.02	.09	0.77	0.19	0.00
47	F2 578500	41.750	122.466	2640	MONTAGUE 3 NE	.00-	2.40	3.90	1.76	3.40	1.20	2.60	2.60	.10	.10	0.70	0.80	0.00
47	F1 594100	41.783	122.000	4250	MOUNT HEBRON R S	13.31	2.82	3.55	1.49	1.17	.64	2.17	.65	.08	.05	0.07	0.62	0.00
12	F6 605000	40.261	123.866	190	MYERS FLAT	97.47	7.00	29.76	14.42	17.80	8.05	13.77	3.79	.15	1.24	1.10	0.39	0.00
47	F3 632900	41.833	123.850	1963	OAK KNOLL RS 2	42.68	3.92	9.95	5.07	9.31	4.58	6.27	2.84	.21	.11	0.42	0.00	0.00
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TABLE A-2

STORAGE GAGE PRECIPITATION DATA

Table A-2 lists storage gages for which the seasonal accumulation of precipitation is reported. These gages are located in the remote mountain regions where no observers are available to operate conventional rain gages. Storage precipitation gages are tanks with capacity for storing an entire year's rainfall, along with antifreeze to melt frozen precipitation and oil to prevent evaporation losses. Once each year, in the summer or early fall, the precipitation that has accumulated since the last measurement is measured and then emptied out. With the addition of the proper amount of oil and antifreeze, the gage is ready to receive the next season's amount. Although logistics preclude conducting the measurement operation exactly at the end of the water year and exactly one year following the previous measurement, data from the gages fairly accurately depict the total precipitation for the water year.

TABLE A-2
 STORAGE GAGE PRECIPITATION DATA
 NORTH COASTAL AREA
 (Measurements by the Department of Water Resources)

Station	Station Number	1973-74 Season	
		Measurement Period	Precipitation in Inches
<u>NORTH COASTAL AREA</u>			
<u>SMITH RIVER</u>			
Camp Six Lookout	1446	6-18-73 to 6-25-74	169.66
<u>LOST RIVER-BUTTE VALLEY</u>			
Bray 10 WSW	1050	6-19-73 to 6-26-74	No data ^{1/}
Crowder Flat	2188	6-27-73 to 6-19-74	21.91
Long Bell Station	5081-01	6-21-73 to 6-20-74	43.31
Medicine Lake	5505	6-21-73 to 8-29-74	83.27
<u>SHASTA-SCOTT VALLEYS</u>			
Gazelle Lookout	3363	6-19-73 to 6-27-74	26.95
<u>KLAMATH RIVER</u>			
Beswick 7S	0715	6-19-73 to 8-29-74	61.43
Blue Creek Mountain	0899	6-17-73 to 6-24-74	176.88
<u>TRINITY RIVER</u>			
Board Camp Mountain	0929	6-17-73 to 6-25-74	No data ^{1/}
Mumbo Basin	6032	6-20-73 to 6-27-74	102.16
<u>EEL RIVER</u>			
Plaskett	6976	6-14-73 to 6-3-74	84.20

^{1/} Vandalism.



SURFACE WATER MEASUREMENT STATIONS

APPENDIX B

SURFACE WATER MEASUREMENTS

This appendix presents surface water data for the 1974 water year, the period from October 1, 1973 to September 30, 1974. The data consist of summary tables of monthly and annual unimpaired runoff from four major North Coastal streams and daily mean discharges at the Department's two North Coastal area gaging stations (see Figure B-1).

In addition to data collected and published by the Department of Water Resources in this appendix, the U. S. Geological Survey collects and publishes data from many additional gaging stations for the same report area. This work is done under a federal-state cooperative contract, or through cooperative arrangements with other local or government agencies. Major exportations from the North Coastal Area, made through the U. S. Bureau of Reclamation's Judge Francis Carr Powerplant and the Pacific Gas and Electric Company's Potter Valley Powerhouse, are shown in the USGS report listed below. The data published in the following reports together with this report present a comprehensive analysis of the water resources for the area:

1. "Water Resources Data for California
Part I. Surface Water Records
Volume 1: Colorado River Basin, Southern Great
Basin, and Pacific Slope Basins excluding Central
Valley"
United States Department of the Interior, Geological
Survey
Prepared in cooperation with the California
Department of Water Resources and with other agencies.
2. Bulletin 120, "Water Conditions in California",
Fall Issue, Department of Water Resources.
3. Bulletin 157, "Index of Stream Gaging Stations in
and Adjacent to California, 1970". June 1971.
Department of Water Resources.

TABLE B-1 ANNUAL UNIMPAIRED RUNOFF

Unimpaired runoff is defined as the flow that would occur naturally at a point in a stream if there were: (1) no upstream controls such as dams or reservoirs; (2) no artificial diversions or accretions; and (3) no change in ground water storage resulting from development.

TABLE B-1
ANNUAL UNIMPAIRED RUNOFF
In Percent of Average

WATER YEAR	KLAMATH RIVER	SALMON RIVER	TRINITY RIVER	EEL RIVER
	COPCO TO ORLEANS	AT SOMESBAR	AT LEWISTON	AT SCOTIA
Average Annual Runoff*	4,434	1,225	1,227	5,379
1921-22			64	69
1922-23			56	51
1923-24			22	16
1924-25			122	133
1925-26			66	61
1926-27			149	146
1927-28	86	89	86	86
1928-29	57	48	43	35
1929-30	-	63	66	65
1930-31	40	39	33	30
1931-32	76	85	59	67
1932-33	81	83	65	68
1933-34	49	47	56	46
1934-35	81	93	79	84
1935-36	90	93	83	107
1936-37	73	80	81	66
1937-38	179	182	171	200
1938-39	58	62	47	50
1939-40	102	104	131	136
1940-41	100	103	208	153
1941-42	104	108	147	138
1942-43	133	142	90	106
1943-44	62	52	53	42
1944-45	82	92	85	89
1945-46	117	124	115	112
1946-47	58	63	60	49
1947-48	96	101	98	88
1948-49	72	78	89	77
1949-50	92	96	70	77
1950-51	142	147	131	133
1951-52	149	159	148	149
1952-53	146	147	131	133
1953-54	138	131	129	129
1954-55	60	48	60	60
1955-56	186	179	165	190
1956-57	97	97	88	81
1957-58	184	184	219	217
1958-59	77	82	85	77
1959-60	78	77	84	87
1960-61	102	98	99	100
1961-62	74	78	85	73
1962-63	133	140	130	132
1963-64	90	92	65	64
1964-65	161	152	140	175
1965-66	101	91	110	96
1966-67	117	103	135	123
1967-68	76	77	82	79
1968-69	135	133	143	161
1969-70	143	130	130	139
1970-71	192	200	136	148
1971-72	142	148	94	87
1972-73	81	73	113	112
1973-74**	219	226	222	219

* Average annual unimpaired runoff in thousands of acre-feet adjusted to the 50-year period October 1920 through September 1970.

** Preliminary data subject to revision.

TABLE B-2
MONTHLY UNIMPAIRED RUNOFF

In Percent of Average

MONTH		KLAMATH RIVER	SALMON RIVER	TRINITY RIVER	EEL RIVER
		COPCO TO ORLEANS	AT SOMESBAR	AT LEWISTON	AT SCOTIA
October 1973	Percent	162	220	202	212
	Average	86	21	21	55
November 1973	Percent	525	652	807	810
	Average	215	55	51	284
December 1973	Percent	194	327	247	227
	Average	487	128	99	939
January 1974	Percent	362	365	506	229
	Average	655	165	110	1225
February 1974	Percent	111	115	85	64
	Average	607	158	149	1176
March 1974	Percent	223	210	198	276
	Average	588	158	157	795
April 1974	Percent	206	160	140	215
	Average	627	179	217	550
May 1974	Percent	149	129	160	79
	Average	587	192	241	239
June 1974	Percent	183	181	212	84
	Average	335	108	123	79
July 1974	Percent	159	180	198	136
	Average	125	35	36	22
August 1974	Percent	136	150	98	181
	Average	67	15	13	10
September 1974	Percent	111	118	52	99
	Average	56	10	9	7
1973-74 Water Year	Percent	219	226	222	219
	Average	4,434	1,225	1,227	5,379

Note: The percent values are preliminary data subject to revision. Average annual unimpaired runoff in thousands of acre-feet adjusted to the 50-year period October 1920 through September 1970.

TABLE B-3 DAILY MEAN DISCHARGE

A stream gaging station is named after the stream and the nearest post office. Each of the two gaging stations has been assigned an identification number, the letter and first digit of which denote the hydrographic unit; the remaining digits further identify the stations.

North Coastal Area

F0 - Smith River	F4 - Trinity River
F1 - Lost River-Butte Valley	F5 - Mad River
F2 - Shasta-Scott Valleys	F6 - Eel River
F3 - Klamath River	F7 - Mattole River

The discharges estimated for periods of no record or invalid record are shown with the letter "E". Also qualified by the letter "E" are discharges obtained from extended ratings which exceed 140 percent of the highest measured flow-rate on which the rating curve was based.

The discharge figures in this table have been rounded off as follows:

1. Daily flows - cubic feet per second

0.0	- 9.9	nearest	Tenth
10	- 999	"	Unit
1,000	- 9,999	"	Ten
10,000	- 99,999	"	Hundred
100,000	- 999,999	"	Thousand

2. Monthly means - cubic feet per second

0.0	- 99.9	nearest	Tenth
100	- 9,999	"	Unit
10,000	- 99,999	"	Ten
100,000	- 999,999	"	Hundred

3. Yearly totals - acre-feet

0.0	- 9,999	nearest	Unit
10,000	- 99,999	"	Ten
100,000	- 999,999	"	Hundred
1,000,000	- 9,999,999	"	Thousand

TABLE B-3
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1974	F21300	LITTLE SHASTA RIVER NEAR MONTAGUE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	3.4	7.4	42	19	24	16	95	58	46	17	9.4	6.7	1
2	3.2	6.1	29	12	23	17	87	60	44	17	9.3	6.5	2
3	3.2	6.1	24	8.0 *	23	16	82	61	43	16	9.2	6.5	3
4	3.2	6.2	21	7.0	21	15	79	62	42	16	9.1	6.5 *	4
5	3.1	7.6	20	5.9	20	16	84	64	43	16	13	6.4	5
6	3.6	19	22	5.1	19	18	77	69	42	15	12	6.3	6
7	5.5	22	48	5.1	18	18	68	79	41	15	9.7	6.3	7
8	3.6	41	39	5.2	18	16	63	85	39	15	9.0	6.2	8
9	3.3	17	27	5.4	17	17	58	85	37	16	8.7	6.2	9
10	3.1	21	22	5.6	17	18	58	84 *	34	16	8.6	6.2 *	10
11	3.1 *	80	23	6.0	16	19	57	85	32	16	8.5	6.1	11
12	3.0	76	20	7.0	16	21	56	85	30	16	8.1	5.9	12
13	3.0	30 *	18	8.0	15	22	52	80	29 *	15	8.1	6.0	13
14	3.0	23	18	38	15	23	49	76	28 *	14	8.1	6.0	14
15	3.1	20	21	112	14	30	49	73	27	14	8.0 *	6.0	15
16	3.0	24	27	192	13	37	51	70	26	14	7.7	5.9	16
17	3.0	25	69	117	12	51	53	68	26	13	7.5	5.9	17
18	3.0	22	39	104	12	70	55	65	25	13	7.5	5.8	18
19	3.0	17	26	86	12	64	54	64	24	12 *	7.6	5.6	19
20	3.2	16	42	65	11	59 *	50	61	24	12	7.6	5.6	20
21	3.9	16	36	48	12	55	50	59	23	12	7.4	5.6	21
22	12	15	26	45 *	12	52	54	57	22	12	7.2	5.6	22
23	15	14	23	43	12	51	60	56	21	11	7.2	5.6	23
24	10	14	24	39	13	50	61	54	21	11	7.2	5.5	24
25	8.1	14	40	38	15	50	60	53	20	11	7.2	5.6	25
26	6.2	14	29	33	16	50	56	53	19	11	7.2	5.6	26
27	5.8	17	27	34	16	50	52	53	19	11	7.0	5.5	27
28	7.9	30	33	34	16	49	49	53	18	11	7.1	5.3	28
29	8.3	67	49	28		103	50	52	18	10	7.0	5.3	29
30	6.8	75	30	26		124	54	50	17	9.8	6.9	5.3	30
31	6.4		25	25		89		48		9.5	6.9		31
MEAN	5.0	25.4	30.3	38.9	16.0	41.5	60.8	65.2	29.3	13.5	8.2	5.9	MEAN
MAX.	15	80	69	192	24	124	95	85	46	17	13	6.7	MAX.
MIN.	3.0	6.1	18	5.1	11	15	49	48	17	9.5	6.9	5.3	MIN.
AC. FT.	309	1512	1862	2393	889	2553	3616	4011	1745	828	506	352	AC. FT.

WATER YEAR SUMMARY

E - ESTIMATED
 NR - NO RECORD
 * - DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW
 # - E AND *

MEAN		MAXIMUM					MINIMUM					TOTAL
DISCHARGE		DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
341		251	3.23	1	15	2315	2.9	0.59	10	12	2215	20,580

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.S.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
41 45 11	122 17 58	NW15 45N 4W	5910 E	10.66	12/22/64	28-NOV 51 E APR 52-APR 55 SEP 56-DATE	28-NOV 51 E APR 52-APR 55 SEP 56-DATE	1956	1964	0.00	LOCAL

Station located S of Ball Mountain Road, 12 mi. NE of Montague, 16 mi. SW of Macdoel. Stage-discharge relationship affected by ice at times. Drainage area is 48.2 sq. mi.

E - Irrigation season only.

TABLE B-3 (CONT.)
DAILY MEAN DISCHARGE
 (IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1974	F42100	NORTH FORK TRINITY RIVER NEAR HELENA

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	33	216	3350	1270	672	2170	3600	942 *	607	246	100	40	1
2	31	175	1870	1060 *	642	1590	3120	931	637	240	99	39	2
3	29	146	1390	923	606	979	2810	891	643	234	93	38	3
4	29	137	1160	808	580	730 *	2730	931	618	232	92	37	4
5	27	321	1020	727	546	638	2660	999	712	226	99	36	5
6	37	1170	960	652	515	635	2590	1070	675	220	107	36	6
7	90	1630	1230	594	492	677	2510	1150	571 *	216	87	35	7
8	60	2620	1300	551	479	617	2430	1190	449	208	74	35	8
9	54	3070 *	1140	514	470	564	2360	1060	438	205	68	35 *	9
10	47	4030	1010	483	467	527	2280	871	488	198 *	64	35	10
11	42	6500	982	464	463	717	2210	824	549	191	63	35	11
12	38 *	3330	945	474	461	1050	2140	774	544	190	62	34	12
13	36	2030	1200	699	454	995	2070	673	481	177	58	34	13
14	34	1620	1120	2650	449	1010	2000	619	460	177	56 *	33	14
15	32	1720 *	993	10100	449	1210	1930	592	417	178	53	33	15
16	31	2560	952	16200	450	1240	1860	525	350	170	50	33	16
17	30	1930	1760	5920	445	1250	1780	470	328	174	50	32	17
18	29	1480	1520	3970 *	463	1230	1720	429	325	177	49	31	18
19	29	1170	1240	3500	722	1120	1650	395	366	189	49	31	19
20	35	1010	1790	2700	627	1060	1580	386	312	196	47	31	20
21	230	897	2700	2090	587	1000	1520	384	302	182	45	30	21
22	954	828	1910	1660	575	964	1450	413	297	166	43	29	22
23	1090	764	1470	1270	547	923	1380	453	292	141	43	28	23
24	641	759	1290	1090	523	899	1320	498	284	134	43	28	24
25	542	726	1440	972	540	994	1260	627	278	142	44	28 *	25
26	385	677	1350	865	598	998	1200	819	273	148	43	27	26
27	344	658	1490	784	631	1090	1140	853	266	143	41	27	27
28	363	833	1830	717	1490	1210	1090	753	262	137	40	27	28
29	302	2130	3200	659	4280	1030	1030	681	256	122	40	27	29
30	246	4650	2200	613	6310	977	977	574	250	113	41	27	30
31	241	1600	1600	639	3290	560	560	560	104	40	40	27	31
MEAN	197	1660	1529	2117	569	1354	1947	721	424	180	60.7	32.4	MEAN
MAX.	1090	6500	3350	16200	1490	6310	3600	1190	712	246	107.	40	MAX.
MIN.	27	137	945	464	445	527	977	384	250	104	40	27	MIN.
AC. FT.	12120	98750	94040	130200	31620	83240	115800	44310	25250	11060	3735	1926	AC. FT.

WATER YEAR SUMMARY

E - ESTIMATED
 NR - NO RECORD
 * - DISCHARGE MEASUREMENT OR
 OBSERVATION OF NO FLOW
 # - E AND *

MEAN DISCHARGE	DISCHARGE	MAXIMUM GAGE HT.	MO.	DAY	TIME	MINIMUM GAGE HT.	MO.	DAY	TIME	TOTAL ACRES FEET	
901	20,000	22.59	1	16	1015	27	5.69	10	5	2115	652,000

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
40 46 55	123 07 40	SW21 34N 11W	35800	27.93	12/22/64	JAN 57-DATE	JAN 57-DATE	1957		0.00	LOCAL

Station located 1.0 mi. above mouth, 0.6 mi. N of Helena. Stage-discharge relationship affected by ice at times. Drainage area is 151 sq. mi.



APPENDIX C

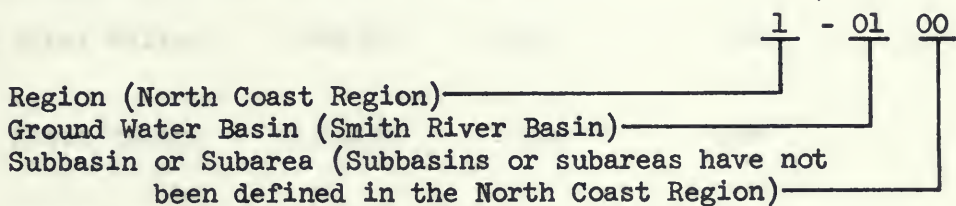
GROUND WATER MEASUREMENTS

This appendix contains ground water level measurements from 61 wells for the period October 1, 1973 through September 30, 1974. It also contains a table which summarizes the measurements. Wells in the network are continuously reviewed and, when conditions dictate, replacement wells are located and measured.

There are nine ground water basins in the North Coastal Region for which data are reported.

Two numbering systems are used by the Department to facilitate the processing of water level measurement data. The two systems are the Region and Basin Designation and the State Well Numbering System as described below.

The regions are those of the California Regional Water Quality Control Boards whose geographic areas are defined in Section 13200 of the Water Code. That portion of Northern California covered by this report is included in the North Coast Region. A decimal system of the form 0-00.00 has been selected according to geographic regions, ground water basins, and subbasins or subareas as follows:



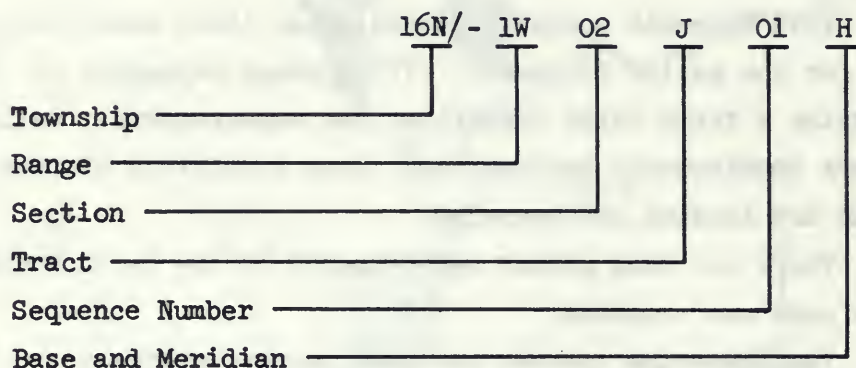
The State Well Numbering System is based on township, range, and section subdivisions of the Public Land Survey.

A section is divided into 40-acre tracts as follows:

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Sequence numbers in a tract are generally assigned in chronological order.

The number of a well, assigned in accordance with this system, is referred to as the State Well Number, as illustrated below:



This number identifies and locates the well. In the example, the well is in Township 16 North, Range 1 West, Tract J of Section 2, located in the Humboldt Base and Meridian.

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

TABLE C-1

AVERAGE CHANGE OF GROUND WATER LEVELS
AND SUMMARY OF WELL MEASUREMENTS REPORTED
NORTH COASTAL AREA

Ground Water Basin		Average Change	Measuring Agency	Number of Wells Reported	
Name	Number	Spring 1973 to Spring 1974 in feet		Fall 1973	Spring 1974

NORTH COASTAL REGION

Smith River Plain	1-01.00	+1.1	DWR	8	8
Butte Valley	1-03.00	+1.1	DWR	15	15
Shasta Valley	1-04.00	+2.3	DWR	9	9
Scott River Valley	1-05.00	+3.6	DWR	5	5
Mad River Valley	1-08.00	+1.0	DWR	3	3
Eel River Valley	1-10.00	+1.4	DWR	7	7
Round Valley	1-11.00	+0.7	DWR	5	5
Laytonville Valley	1-12.00	+1.3	DWR	4	4
Little Lake Valley	1-13.00	+2.0	DWR	5	5

DWR - Department of Water Resources

TABLE C-2 GROUND WATER LEVELS AT WELLS

An explanation of the column headings and the code symbols follows:

State Well Number - Refer to the explanation presented on page 17.

Ground Surface Elevation - The numbers in this column are the elevation in feet above mean sea level (USGS datum) of the ground surface at the well. Elevations are usually taken from topographic maps and the accuracy is controlled by topographic standards.

Date - The date shown in the column is the date when the depth measurement given in the next column was made.

Ground Surface to Water Surface - This is the measured depth in feet from the ground surface to the water surface in the well; some of the depth measurements in the column may be preceded by a number in parentheses to indicate a questionable measurement. The code applicable to these "questionable measurements" is as follows:

- | | |
|--------------------------------------|--|
| (1) Pumping | (6) Other |
| (2) Nearby pump operating | (7) Recharge operation at or near well |
| (3) Casing leaking or wet | (8) Oil in casing |
| (4) Pumped recently | (9) Caved or deepened measurement |
| (5) Air or pressure gage measurement | |

When a measurement was attempted, but could not be obtained, then only a number in parentheses is shown in the column. The code applicable to these "no measurements" is as follows:

- | | |
|-------------------------------|-------------------------------|
| (1) Pumping | (6) Well has been destroyed |
| (2) Pump house locked | (7) Special |
| (3) Tape hung up | (8) Casing leaking or wet |
| (4) Cannot get tape in casing | (9) Temporarily inaccessible |
| (5) Unable to locate well | (0) Measurements discontinued |

The words FLOW and DRY are shown in this column to indicate a flowing or dry well, respectively. A minus sign preceding the number in this column indicates that the static water level in the well is this distance in feet above the ground surface.

Water Surface Elevation - This is the elevation in feet above mean sea level (USGS datum) of the water surface in the well. It was derived by subtraction of the depth measurement from the ground surface elevation.

Agency Supplying Data - Each of these numbers is the code number for the agency supplying data for that measurement. The Department of Water Resources is the sole agency supplying ground water level measurement data for this report. It has been assigned an agency code number of 5050.

TABLE C-2
GROUND WATER LEVELS AT WELLS
NORTH COASTAL AREA

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SMITH RIVER PLAIN 1-01.00						SCOTT RIVER VALLEY 1-05.00					
16M/01W-02J01 H	127.0	9-24-73 4-17-74	Dry 16.8	110.2	5050 5050	42M/09W-02A02 M	2746.0	10-09-73 4-10-74	12.2 4.0	2733.8 2742.0	5050 5050
16M/01W-17E01 H	48.0	9-24-73 4-17-74	22.1 9.6	25.9 38.4	5050 5050	42M/09W-27B01 M	2930.0	10-09-73 4-10-74	7.7 3.2	2922.3 2926.8	5050 5050
17M/01W-02P01 H	31.0	9-24-73 4-17-74	19.0 16.6	12.0 14.4	5050 5050	43M/09W-23F01 M	2728.0	10-09-73 4-10-74	6.7 1.9	2721.3 2726.1	5050 5050
17M/01W-03B01 H	14.0	9-24-73 4-17-74	13.4 9.7	0.6 4.3	5050 5050	43M/09W-24F01 M	2735.0	10-09-73 4-10-74	(1) 1.0	2733.2	5050 5050
17M/01W-15M02 H	21.0	9-24-73 4-17-74	16.6 6.6	4.4 14.4	5050 5050	44M/09W-28P01 M	2711.0	10-09-73 4-10-74	26.5 3.0	2684.5 2708.0	5050 5050
17M/01W-20Q01 H	15.0	9-24-73 4-17-74	6.0 1.5	9.0 13.5	5050 5050	MAD RIVER VALLEY 1-06.00					
17M/01W-27Q05 H	40.0	9-24-73 4-17-74	20.5 10.6	19.5 29.4	5050 5050	06M/01E-07W01 H	11.0	9-25-73 4-16-74	9.4 2.0	1.6 9.0	5050 5050
18M/01W-27P03 H	15.0	9-24-73 4-17-74	6.5 5.2	8.5 9.8	5050 5050	06M/01E-17D01 H	14.0	9-25-73 4-16-74	14.1 4.5	1.9 11.5	5050 5050
NOTKE VALLEY 1-03.00						06M/01E-29F01 H	25.0	9-25-73 4-16-74	9.4 6.4	15.4 18.6	5050 5050
45M/01W-06A01 M	4258.0	10-10-73 4-11-74	40.8 26.8	4217.2 4231.2	5050 5050	EEL RIVER VALLEY 1-10.00					
45M/02W-11P01 M	4275.0	10-10-73 4-11-74	54.8 38.7	4220.2 4236.3	5050 5050	02M/01W-08B01 H	34.0	9-25-73 4-16-74	23.2 11.2	10.8 22.8	5050 5050
46M/01E-06M01 M	4242.0	10-10-73 4-11-74	27.2 20.0	4214.8 4222.0	5050 5050	03M/01W-18D01 H	15.0	9-25-73 4-16-74	6.0 2.0	9.0 13.0	5050 5050
46M/01W-17B01 M	4246.0	10-10-73 4-11-74	45.2 33.5	4200.8 4212.5	5050 5050	03M/01W-30M01 H	19.0	9-25-73 4-16-74	17.2 10.2	1.8 8.8	5050 5050
46M/01W-18Q01 M	4247.0	10-10-73 4-11-74	34.5 16.9	4212.5 4230.1	5050 5050	03M/01W-34J01 H	53.0	9-25-73 4-16-74	36.0 29.8	17.0 23.2	5050 5050
46M/02W-25R02 M	4256.0	10-10-73 4-11-74	39.3 25.5	4216.7 4230.5	5050 5050	03M/02W-13J01 H	10.0	9-25-73 4-16-74	7.2 3.7	2.8 6.3	5050 5050
46M/02W-26Q01 M	4254.0	10-10-73 4-11-74	22.0 12.0	4232.0 4242.0	5050 5050	03M/02W-26R01 H	12.0	9-25-73 4-16-74	11.0 4.8	1.0 7.2	5050 5050
47M/01E-06A02 M	4244.5	10-10-73 4-11-74	34.4 30.5	4210.1 4214.0	5050 5050	03M/02W-35M02 W	13.0	9-25-73 4-16-74	10.8 6.2	2.2 6.8	5050 5050
47M/01E-20D01 M	4240.0	10-10-73 4-11-74	25.6 23.8	4214.2 4216.2	5050 5050	ROUND VALLEY 1-11.00					
47M/01W-04D01 M	4241.5	10-10-73 4-11-74	7.9 (9)	4233.6	5050	22M/12W-04B01 M	1351.0	10-03-73 4-18-74	15.4 5.7	1335.4 1345.3	5050 5050
47M/01W-04D02 M	4241.5	10-10-73 4-11-74	8.3 (9)	4233.2	5050	22M/12W-06L03 H	1370.0	10-03-73 4-18-74	7.0 -11.1	1343.0 1381.1	5050 5050
47M/01W-19L01 M	4238.0	10-10-73 4-11-74	6.0 1.7	4232.0 4236.3	5050 5050	22M/13W-12R01 M	1400.0	10-03-73 4-18-74	29.7 5.1	1370.3 1394.9	5050 5050
47M/01W-27B01 M	4233.0	10-10-73 4-11-74	9.0 6.0	4224.0 4227.0	5050 5050	23M/13W-36C03 H	1410.0	10-03-73 4-18-74	30.5 8.2	1379.5 1401.8	5050 5050
47M/01W-34Q01 M	4237.0	10-10-73 4-11-74	20.2 16.0	4216.8 4221.0	5050 5050	23M/13W-36Q01 M	1403.0	10-03-73 4-18-74	21.2 -0.5	1381.8 1403.5	5050 5050
48M/01W-26M01 M	4244.0	10-10-73 4-11-74	(2) (2)	5050 5050	5050	LAYTONVILLE VALLEY 1-12.00					
SBASTA VALLEY 1-04.00						21M/14W-30M01 M	1688.0	10-03-73 4-17-74	16.7 3.7	1671.3 1684.3	5050 5050
42M/05W-20J01 M	2882.0	10-09-73 4-10-74	3.4 4.6	2878.6 2877.4	5050 5050	21M/15W-01L02 M	1682.0	10-03-73 4-17-74	39.0 4.0	1643.0 1678.0	5050 5050
42M/06W-10J01 M	2835.0	10-09-73 4-10-74	15.7 2.5	2819.3 2832.5	5050 5050	21M/15W-12M02 H	1630.0	10-03-73 4-17-74	14.7 3.5	1613.3 1626.5	5050 5050
43M/05W-11A01 M	2740.0	10-10-73 4-10-74	127.5 120.5	2612.5 2619.5	5050 5050	21M/15W-24A01 M	1653.0	10-03-73 4-17-74	11.9 2.2	1641.1 1650.8	5050 5050
43M/06W-15F03 M	2663.0	10-09-73 4-10-74	11.0 7.4	2652.0 2655.4	5050 5050	LITTLE LAKE VALLEY 1-13.00					
43M/06W-22A01 M	2665.0	10-09-73 4-10-74	28.0 6.7	2637.0 2658.3	5050 5050	18M/13W-08L01 M	1340.0	10-03-73 4-18-74	8.6 1.5	1331.4 1338.5	5050 5050
43M/06W-33C01 M	2810.0	10-09-73 4-10-74	51.2 49.6	2758.8 2760.4	5050 5050	18M/13W-17J01 M	1370.0	10-03-73 4-18-74	31.2 13.6	1338.8 1356.4	5050 5050
44M/05W-34B01 H	2637.0	10-10-73 4-10-74	28.4 28.0	2608.6 2609.0	5050 5050	18M/13W-18B01 M	1365.0	10-03-73 4-18-74	24.0 17.8	1339.0 1347.2	5050 5050
44M/06W-10F01 M	2537.0	10-09-73 4-10-74	20.2 24.0	2516.8 2513.0	5050 5050	19M/13W-32F01 M	1347.0	10-03-73 4-18-74	14.3 3.5	1332.7 1343.5	5050 5050
45M/06W-19E01 M	2538.0	10-09-73 4-10-74	22.0 13.0	2516.0 2523.0	5050 5050	19M/13W-32L02 H	1350.0	10-03-73 4-18-74	14.3 5.3	1335.7 1343.2	5050 5050



APPENDIX D

SURFACE WATER QUALITY

This appendix presents surface water quality data collected during the period from October 1, 1973, through September 30, 1974. The data were collected from 25 stream stations in the North Coastal area.

At the time of field sampling, dissolved oxygen, pH, and temperature measurements are made and gage height and time are noted. Comments on local conditions are noted in field books which are available in the files of the Department of Water Resources. The mineral constituents were determined in accordance with methods described in "Standard Methods for the Examination of Water and Waste Water", prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, 13th Edition, 1971.

Each station in this appendix has been assigned a station number. The numbering system is described in Appendix B, "Surface Water Measurements".

TABLE D-1
 SAMPLING STATION DATA AND INDEX
 North Coastal Area

Station	Station Number	Location*	Beginning of Record	Frequency of Sampling	Analyses on Page
BEAR RIVER AT CAPETOWN	F75100.00	01N/03W-13 H	MAY 1964	Annually	36
BLACK BUTTE RIVER NEAR COVELO	F63200.00	23N/11W-28 M	NOV. 1964	Monthly	34, 39, 45
EEL RIVER ABOVE OUTLET CREEK NEAR DOS RIOS	F61329.50	21N/13W-32 M	APR. 1958	Monthly	32, 33, 39, 45
EEL RIVER AT SCOTIA	F61100.00	01N/01E-05 H	APR. 1951	Monthly	31, 32, 37, 39, 41, 45, 47
EEL RIVER AT SOUTH FORK	F61154.50	01S/02E-26 H	APR. 1951	Monthly	32, 39, 45, 47
EEL RIVER, MIDDLE FORK, AT DOS RIOS	F63009.01	21N/13W-06 M	APR. 1958	Monthly	33, 34, 39, 45
EEL RIVER, SOUTH FORK, NEAR MIRANDA	F64100.00	03S/04E-30 H	APR. 1951	Monthly	35, 39, 45
KLAMATH RIVER ABOVE HAMBURG RESERVOIR SITE	F31470.00	46N/10W-14 M	DEC. 1958	Bimonthly	29
KLAMATH RIVER AT ORLEANS	F31220.01	11N/06E-31 H	JAN. 1964	Monthly	28, 37, 43
KLAMATH RIVER BELOW IRON GATE DAM	F31599.01	47N/05W-20 M	DEC. 1961	Monthly	29, 30, 37, 43
KLAMATH RIVER NEAR KLAMATH	F31100.00	13N/02E-19 H	APR. 1951	Monthly	28, 37, 41, 43, 47
KLAMATH RIVER NEAR SELAD VALLEY	F31430.00	46N/12W-03 M	DEC. 1958	Monthly	28, 29, 37, 43
MAD RIVER NEAR ARCATA	F51100.00	06N/01E-15 H	NOV. 1958	Bimonthly	31, 37, 43
MATTOLE RIVER NEAR PETROLIA	F71100.00	02S/02W-11 H	JAN. 1959	Annually	35
MILL CREEK NEAR COVELO	F63050.00	22N/12W-22 M	FEB. 1965	Monthly	34, 45
OUTLET CREEK NEAR LONGVALE	F61350.00	20N/14W-01 M	MAY 1958	Monthly	33, 39, 45
REDWOOD CREEK AT ORICK	F55100.00	10N/01E-04 H	NOV. 1958	Monthly	31, 37, 45, 47
SALMON RIVER AT SOMESBAR	F34100.00	11N/06E-03 H	NOV. 1958	Semiannually	30
SCOTT RIVER NEAR FORT JONES	F25250.00	44N/10W-28 M	DEC. 1958	Bimonthly	27, 37, 43, 47
SHASTA RIVER NEAR YREKA	F21050.00	46N/07W-24 M	DEC. 1958	Bimonthly	27, 37, 43, 47
SMITH RIVER NEAR CRESCENT CITY	F01300.00	16N/01E-10 H	APR. 1951	Monthly	27, 37, 43, 47
TRINITY RIVER AT HOOPA	F41080.00	08N/04E-25 H	APR. 1951	Monthly	30, 37, 43, 47
TRINITY RIVER AT LEWISTON	F41640.00	33N/08W-17 M	APR. 1951	Bimonthly	30, 31, 37, 43
TRINITY RIVER NEAR BURNT RANCH	F41376.00	05N/07E-19 H	APR. 1958	Bimonthly	30, 37, 43
VAN DUZEN RIVER NEAR BRIDGEVILLE	F65279.00	01N/02E-12 H	APR. 1958	Monthly	35, 39, 45, 47

* H = Humboldt Base and Meridian
 M = Mount Diablo Base and Meridian

TABLE D-2 MINERAL ANALYSES OF SURFACE WATER

Lab and Sampler Agency Codes

- 5000 - U. S. Geological Survey
- 5050 - Department of Water Resources

Abbreviations

- TIME - Pacific Standard Time on a 24-hour clock.
- G.H. - Instantaneous gage height in feet above an established datum.
- Q - Instantaneous discharge measured in cubic feet per second (cfs). "E" indicates the value has been estimated.
- DEPTH - Depth at which sample was collected.
- DO - Dissolved oxygen content in milligrams per liter.
- SAT - Percent of normal dissolved oxygen saturation.
- TEMP - Water temperature in degrees Fahrenheit (F) and Celsius (C).
- PH - Measure of acidity or alkalinity of water.
- EC - Electrical conductance in micromhos at 25° C.
- TDS - Gravimetric determination of total dissolved solids at 180° C.
- SUM - Total dissolved solids by summation of analyzed constituents.
- TH - Total hardness.
- NCH - Noncarbonate hardness - any excess of total hardness over total alkalinity.
- TURB - Jackson Turbidity Units measured with a Hellige Turbidimeter (E) or a Hach Nephelometer (A). Field determination (F).
- SAR - Sodium adsorption ratio.
- PERCENT REACTANCE VALUE - Determined by dividing the sum of the cations or anions in milliequivalents per liter into each constituent in milliequivalents per liter arriving at a percentage. For a partial analysis, an approximate value is determined by multiplying the electrical conductance by 0.01 and using that as the cation or anion sum.

Mineral Constituents

- | | | | |
|------------------|---------------|------------------|-------------|
| B | - Boron | K | - Potassium |
| CA | - Calcium | MG | - Magnesium |
| CL | - Chloride | NA | - Sodium |
| CO ₃ | - Carbonate | NO ₃ | - Nitrate |
| F | - Fluoride | SI ₀₂ | - Silica |
| HCO ₃ | - Bicarbonate | SO ₄ | - Sulfate |

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN						MILLIEQUIVALENTS PER LITER PERCENT				MILLIGRAMS PER LITER					REM
						CA	Mg	Na	K	CO3	HCO3	SO4	CL	VALU	NO3	0	F	TDS SUM	TH NCH	TURB SAR	
F0 1300.00 SMITH RIVER NEAR CRESCENT CITY																					
10/02/73	5050	8.06	12.2	55.4F	7.4	141	--	--	2.5	--	0	60	--	2.8	--	.00	--		74	04	
0655	5050	389	116	13.0C	7.6	142	--	--	.11	7	.00	1.31	--	.04	--	--	--			0.1	
11/14/73	5050	20.95	13.6	50.0F	7.4	76	3.5	7.7	1.9	.4	0	46	1.8	2.4	.0	.00	--	40	40	53A	
0810	5050	27500	120	10.0C	7.2	81	.17	.63	.08	.01	.00	.75	.04	.07	.00	--	--	40	3	0.1	
12/11/73	5050	14.26	13.5	48.2F	7.3	76	--	--	--	--	--	--	--	--	--	--	--			124F	
0810	5050	8040	117	9.0C																	
01/15/74	5050	27.98	13.8	49.1F	7.6	63	--	--	1.5	--	0	38	--	1.0	--	.00	--		31	200A	
1300	5050	63900	121	9.5C	7.5	67	--	--	.07	10	.00	.62	--	.03	--	--	--			0.1	
02/05/74	5050	13.25	14.2	42.8F	7.2	80	--	--	--	--	--	--	--	--	--	--	--			54F	
0705	5050	5060	114	6.0C																	
03/05/74	5050	14.02	14.0	47.3F	7.3	73	--	--	--	--	--	--	--	--	--	--	--			54F	
0645	5050	6740	120	8.5C																	
04/02/74	5050	20.94	13.7	46.4F	7.4		--	--	1.6	--	0	36	--	2.0	--	.00	--		32	48A	
0700	5050	26300	116	8.0C	8.0	66	--	--	.07	10	.00	.59	--	.06	--	--	--			0.1	
05/14/74	5050	9.71	12.3	50.0F	7.4	91	--	--	--	--	--	--	--	--	--	--	--			14F	
0705	5050	1590	109	10.0C																	
06/11/74	5050	8.99	9.6	61.7F	7.6	101	--	--	--	--	--	--	--	--	--	--	--			14F	
0735	5050	1040	98	16.5C																	
07/09/74	5050	8.35	9.9	64.4F	7.9	126	--	--	--	--	--	--	--	--	--	--	--			14F	
0635	5050	610	104	18.0C																	
08/06/74	5050	7.73		68.0F	7.5	147	--	--	--	--	--	--	--	--	--	--	--			14F	
0720	5050	293.		20.0C																	
09/04/74	5050	7.56	9.0	66.2F	7.5	154	--	--	--	--	--	--	--	--	--	--	--			14F	
0655	5050	238	97	19.0C																	
F2 1050.00 SHASTA RIVER NEAR TREKA																					
11/15/73	5050	3.76	12.9	48.2F	8.1	507	--	--	--	--	--	--	--	--	--	--	--			54F	
0930	5050	304	119	9.0C																	
01/14/74	5050	4.80	11.4	44.6F	8.2	354	23	22	21	2.5	0	197	12	11	4.8	.30	--	207	148	300A	
1305	5050	740	100	7.0C	7.4	394	1.15	1.81	.91	.06	.00	3.23	.25	.31	.06	--	--	193	0	0.9	
03/15/74	5050	4.41	11.5	48.2F	8.1	445	--	--	--	--	--	--	--	--	--	--	--			84F	
0905	5050	564	106	9.0C																	
05/07/74	5050	3.68	9.8	65.3F	8.2		--	--	21	--	0	238	--	12	--	.30	--		176	3A	
1120	5050	272	111	18.5C	8.3	410	--	--	.91	21	.00	3.90	--	.34	--	--	--			0.7	
07/16/74	5050	3.03	10.8	71.6F	8.2	556	--	--	--	--	--	--	--	--	--	--	--			14F	
1230	5050	77	131	22.0C																	
09/13/74	5050	3.05	9.4	58.1F	8.1	501	--	--	--	--	--	--	--	--	--	--	--			24F	
0820	5050	81	98	14.5C																	
F2 5250.00 SCOTT RIVER NEAR FORT JONES																					
11/15/73	5050	8.39	12.8	44.6F	7.2	109	9.0	7.2	2.0	.4	0	61	2.1	1.8	1.2	.00	--	80	52	16A	
1230	5050	1810	115	7.0C	7.4	107	.45	.59	.09	.01	.00	1.00	.04	.05	.02	--	--	54	2	0.1	
01/14/74	5050	9.57	12.3	41.0F	7.1	123	--	--	--	--	--	--	--	--	--	--	--			804F	
1525	5050	2790	105	5.0C																	
03/15/74	5050	8.02	11.6	48.2F	7.6	199	--	--	--	--	--	--	--	--	--	--	--			304F	
1145	5050	1680	109	9.0C																	
05/07/74	5050	9.51	10.5	54.5F	7.5		--	--	1.7	--	0	61	--	.0	--	.00	--		51	36A	
1430	5050	2850	107	12.5C	7.5	106	--	--	.07	6	.00	1.00	--	.00	--	--	--			0.1	
07/16/74	5050		12.0	68.9F	8.0	231	--	--	--	--	--	--	--	--	--	--	--			14F	
1505	5050	314	145	20.5C																	
09/13/74	5050	5.22	10.9	63.5F	8.1	308	33	18	5.0	.9	0	181	8.6	3.4	3.8	.10	--	168	156	04	
1100	5050	74	124	17.5C	8.2	308	1.65	1.48	.22	.02	.00	2.97	.18	.10	.06	--	--	162	8	0.2	
							.49	.44	.77	.1		.90	.5	.3	.2						

TABLE D-2 cont
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	NO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER					REM
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	8	F	TDS	TH	TURB							
F3 1100.00		KLAMATH RIVER NEAR KLAMATH																								
10/02/73	5050	4.69	10.8	59.9F	7.8	219	21	9.1	9.7	1.6	0	112	15	4.6	--	.09	.2	134	90	14						
0810	5000	2580	10.9	15.5C	8.1	216	1.05	.75	.42	.04	.00	1.84	.31	.13			17.0	133	0	0.4						
11/13/73	5050		12.4	48.2F	7.3	102	11	4.7	2.7	.8	0	57	5.1	1.0	--	.02	.0	67	47	100A						
1635	5000	97600	10.7	9.0C	10.3		.55	.39	.12	.02	.00	.93	.11	.03			13.0	66	1	0.2						
12/11/73	5050		12.9	43.7F	7.4	127	13	5.4	4.0	.7	0	70	5.5	1.8	--	.03	.1	82	55	50A						
0935	5000	36700	10.5	6.5C			.65	.44	.17	.02	.00	1.15	.11	.05			16.0	81	0	0.2						
01/15/74	5050		12.9	46.4F	8.0	95	11	4.1	2.7	.7	0	49	3.7	1.6	--	.03	.0	61	44	200A						
0935	5000	136000	10.9	8.0C			.55	.34	.12	.02	.00	.80	.08	.05			12.0	60	5	0.2						
02/05/74	5050		13.1	42.8F	7.5	144	14	6.4	4.9	.9	--	78	5.6	2.6	--	.03	.1	92	61	70A						
0855	5000	35600	10.5	6.0C			.70	.53	.21	.02		1.28	.12	.07			18.0			0.3						
03/05/74	5050		13.2	46.4F	7.7	148	16	6.7	4.2	1.0	--	76	6.9	2.1	--	.03	.1	93	68	80A						
0835	5000	46000	11.1	8.0C			.80	.55	.18	.03		1.25	.14	.06			17.0			0.2						
04/02/74	5050		13.1	46.4F	7.9	152	13	5.1	3.3	1.0	--	60	4.6	2.0	--	.03	.1	73	54	100A	X					
0845	5000	180000	11.0	8.0C	114		.65	.42	.14	.03		.98	.10	.06			13.0			0.2						
05/14/74	5050		11.5	52.7F	6.3	122	13	5.4	3.8	.9	--	67	6.9	2.2	--	.03	.0	80	55	30A						
0915	5000	24500	10.5	11.5C	119		.65	.44	.17	.02		1.10	.14	.06			14.0			0.2						
06/11/74	5050		9.3	62.6F	7.4	107	12	5.3	2.9	.8	--	61	4.6	1.6	--	.03	.0	70	52	20A						
0910	5000		9.6	17.0C	110		.60	.44	.13	.02		1.00	.10	.05			12.0			0.2						
07/09/74	5050		8.9	62.6F	7.5	149	17	6.5	6.9	1.0	--	84	7.8	2.3	--	.03	.0	97	69	1A						
0750	5000	6600	9.2	17.0C	154		.85	.53	.30	.03		1.38	.16	.06			14.0			0.4						
08/06/74	5050		215.3F	76.0	175.0	20	7.6	6.3	1.8	--	--	100	8.5	4.0	--	70.0	.1	114	81	2A	X					
0830	5000	3700	101.7C	7.6	184		1.00	.63	.27	.05		1.64	.18	.11			16.0			0.3						
09/04/74	5050		8.5	68.0F	7.9	206	22	7.2	9.2	1.6	--	110	10	4.4	--	.08	.1	127	85	2A						
0810	5000	2950	9.3	20.0C	203		1.10	.59	.40	.04		1.80	.21	.12			18.0			0.4						
F3 1220.01		KLAMATH RIVER AT ORLEANS																								
10/01/73	5050	0.58	12.0	61.7F	7.9	230	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF					
1105	5050	1650	12.4	16.5C																						
11/13/73	5050	13.80	13.1	46.4F	7.3	100	11	4.5	3.4	1.2	0	54	6.6	.5	.6	.00	--	82	46	100A	E					
1205	5050	33600	11.2	8.0C	8.0	105	.55	.37	.15	.03	.00	.89	.14	.01	.01			54	2	0.2	T					
12/10/73	5050	10.28	14.5	44.6F	7.4	128	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25AF					
1225	5050	19000	12.1	7.0C																						
01/14/74	5050	10.86	14.2	44.6F	8.2	112	--	--	--	--	--	--	--	--	--	--	--	--	--	--	90AF					
1245	5050	50000E	11.8	7.0C																						
02/04/74	5050	11.61	14.7	41.9F	7.7	147	--	--	--	--	--	--	--	--	--	--	--	--	--	--	40AF					
1145	5050	21300	11.4	5.5C																						
03/04/74	5050	11.56	14.5	45.5F	7.5	160	--	--	--	--	--	--	--	--	--	--	--	--	--	--	41AF					
1255	5050	19500	12.2	7.5C																						
04/01/74	5050	19.72	13.3	46.4F	7.7		--	--	4.2	--	0	63	--	1.2	--	.00	--	--	--	50	220A					
1145	5050	75000	11.3	8.0C	8.1	111			.18		.00	1.03		.03						0.3						
05/13/74	5050	9.93	12.1	52.7F	7.5	110	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22AF					
1120	5050	16100	11.2	11.5C																						
06/10/74	5050	8.32	10.0	59.0F	7.8	98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4AF					
1055	5050	11700	10.9	15.0C																						
07/00/74	5050	4.43	9.5	62.6F	7.7	144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2AF					
1210	5050	4120	9.9	17.0C																						
08/05/74	5050	2.81		74.3F	7.9	178	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF					
1140	5050	2500		23.5C																						
09/03/74	5050	2.40	9.3	73.4F	7.9	205	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF					
1050	5050	2250	10.9	23.0C																						
F3 1430.00		KLAMATH RIVER NEAR SEIAD VALLEY																								
10/15/73	5050		13.4	58.1F	8.9	274	--	--	21	--	0	135	--	6.9	--	.10	--	--	--	90	1A					
1120	5050	1530	13.7	14.5C	7.8	278			.91		.00	2.21		.19						1.0						
11/15/73	5050		13.0	47.3F	8.1	181	14	9.2	9.4	1.4	0	93	8.2	4.3	--	.10	--	120	73	13A	T					
1105	5050	6130	11.6	8.5C	8.1	180	.70	.76	.41	.04	.00	1.52	.17	.12				92	0	0.5						

TABLE D-2 cont
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q. DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER				MILLIGRAMS PER LITER					REM	
						CA	Mg	NA	K	CO ₃	HCO ₃	SO ₄	CL	PERCENT REACTANCE VALUE	NO ₃	B	F	TDS SUM		TH NCH
F3		1599.01	KLAHATH RIVER BELOW IRON GATE DAM				CONTINUED													
08/14/74 0955	5050	1030	8.8 105	69.8F 21.0C	8.3	156	--	--	--	--	--	--	--	--	--	--	--	--	--	2AF
09/13/74 0745	5050	1340	7.0 79	64.4F 18.0C	7.6	203	--	--	--	--	--	--	--	--	--	--	--	--	--	2AF
F3		4100.00	SALMON RIVER AT SOMESBAR																	
10/01/73 1145	5050 5050	200	12.5 127	59.9F 15.5C	8.1	141	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF
06/10/74 1135	5050 5050	7.18 3720	10.7 102	54.5F 12.5C	7.2 7.7	49 48	6.6 33 66	1.3 11 22	1.2 0.5 10	.4 0.1 2	0 0.00	26 43 96	.8 0.02 4	.0 0.00 0.00	.00	--	37 23	22 1	5A 0.1	E T S
F4		1080.00	TRINITY RIVER AT HOOPA																	
10/01/73 1005	5050 5050	14.28 603	10.9 112	61.7F 16.5C	7.8	199	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF
11/13/73 1305	5050 5050	25.09 22300	12.1 107	49.1F 9.5C	7.4 8.1	117 122	16 80 63	4.1 34 27	2.5 11 9	.8 0.2 2	0 0.00	64 105 88	4.9 10 8	1.4 0.04 3	.00	--	75 61	57 5	130A 0.1	
12/10/73 1115	5050 5050	19.97 7300	13.2 112	46.4F 8.0C	7.4	135	--	--	--	--	--	--	--	--	--	--	--	--	--	39AF
01/14/74 1130	5050 5050	16.72 10000E	13.2 112	46.4F 8.0C	7.5	135	--	--	--	--	--	--	--	--	--	--	--	--	--	105AF
02/04/74 1035	5050 5050	19.74 9000	13.8 113	43.7F 6.5C	8.3	144	--	--	--	--	--	--	--	--	--	--	--	--	--	52AF
03/04/74 1145	5050 5050	22.39 14500	13.5 116	47.3F 8.5C	7.7	148	--	--	--	--	--	--	--	--	--	--	--	--	--	81AF
04/01/74 1040	5050 5050	31.84 48700	12.9 108	45.5F 7.5C	8.3 8.1	111	--	--	2.2 1.9	--	0 0.00	63 1.03	--	1.6 0.05	--	.00	--	--	48	360A 0.1
05/13/74 1005	5050 5050	18.37 8000	11.4 104	51.8F 11.0C	7.6	124	--	--	--	--	--	--	--	--	--	--	--	--	--	18AF
06/10/74 0935	5050	16.94 3800	9.4 96	61.2F 16.2C	7.6	126	--	--	--	--	--	--	--	--	--	--	--	--	--	8AF
07/08/74 1110	5050	1500	9.5 101	64.4F 18.0C	7.9	163	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF
08/05/74 1040	5050 5050	14.03 900	--	71.6F 22.0C	7.4 7.8	175 176	--	--	3.7 1.6 9	--	0 0.00	94 1.54	--	3.8 0.11	--	.00	--	--	83	1A 0.2
09/03/74 0950	5050	13.79 580	9.7 107	68.0F 20.0C	8.0	204	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF
F4		1376.00	TRINITY RIVER NEAR BURNT RANCH																	
11/13/73 1030	5050 5050	11.4 5200	11.4 101	48.2F 9.0C	7.1	99	--	--	--	--	--	--	--	--	--	--	--	--	--	30AF
01/14/74 1025	5050 5050	12.8 3270	10.8 108	44.6F 7.0C	7.4	139	--	--	--	--	--	--	--	--	--	--	--	--	--	15AF
03/04/74 1030	5050 5050	13.5 4480	11.4 114	44.6F 7.0C	7.5	154	--	--	--	--	--	--	--	--	--	--	--	--	--	20AF
05/13/74 0905	5050 5050	11.8 3170	11.0 110	51.8F 11.0C	7.4 7.5	100	--	--	2.7 1.2 12	--	0 0.00	56 0.92	--	1.4 0.04	--	.00	--	--	46	11A 0.2
07/08/74 1010	5050	4950	9.7 102	61.7F 16.5C	7.9	120	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF
09/03/74 0855	5050	356	9.1 103	68.0F 20.0C	8.2	158	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF
F4		1640.00	TRINITY RIVER AT LEWISTON																	
11/13/73 0845	5050 5050	3.43 320E	10.3 92	46.4F 8.0C	8.0	87	--	--	--	--	--	--	--	--	--	--	--	--	--	13AF
01/14/74 0825	5050 5050	3.07 171	11.8 104	45.5F 7.5C	7.4	82	--	--	--	--	--	--	--	--	--	--	--	--	--	8AF
03/04/74 0800	5050 5050	3.36 276	12.6 110	44.6F 7.0C	7.1 7.7	76 77	--	--	1.7 0.7 9	--	0 0.00	42 0.69	--	1.7 0.05	--	.00	--	--	35	37A 0.1

TABLE D-2 cont
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. 0 DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER					TDS SUM	TH NCH	TURB SAR	REM
						CA	MG	NA	K	CO3	PERCENT HCO3	MILLIEQUIVALENTS PER LITER 504	CL	NO3	R	F 5102	504	CL	NO3					
F4 1640.00 TRINITY RIVER AT LEWISTON						CONTINUED																		
05/13/74 0715	5050 5050	5.09 1300	13.0 116	46.4F 8.0C	7.6 74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13AF
05/16/74 1235	5050 5050	5.40 120	13.2 120	47.3F 8.5C	7.3 74	3.6 .18 23	6.3 .52 66	1.6 .07 9	.9 .02 3	0 .00	44 .72 97	.6 .01 1	.5 .01 1	--	--	.10	--	43 35	35	0	12A 0.1			
07/08/74 0730	5050	3.06 162	9.4 87	49.1F 9.5C	7.4 77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7AF	
09/03/74 0725	5050	3.28 215	11.6 105	47.3F 8.5C	8.1 76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4AF	
F5 1100.00 MAD RIVER NEAR ARCATA																								
11/13/73 1455	5050 5050	12.78 13900	11.6 103	50.0F 17.0C	7.4 7.6	85 98	14 .70 69	1.2 .10 10	3.5 .15 15	2.9 .07 7	0 .00	45 .74 77	7.6 .16 17	1.4 .04 4	1.2 .02 2	.00	--	84 54	40 3	450A 0.2	E T S			
01/15/74 0730	5050 5050	12.4 18700	11.6 116	50.0F 10.0C	7.3 94	--	--	2.7 .12	--	0 .00	50 .82	--	.4 .01	--	--	.20	--	45	1300A 0.2					
03/04/74 1500	5050 5050	8.52 4400	13.1 110	46.4F 8.0C	7.4 93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	165AF		
05/13/74 1350	5050 5050	4.49 276	11.5 116	60.8F 16.0C	8.2 7.9	158	--	4.4 .19 12	--	0 .00	80 1.31	--	1.9 .05	--	.00	--	--	72	3A 0.2					
07/08/74 1415	5050	9.6 34	9.9	62.6F 17.0C	7.9 217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
09/03/74 1320	5050	10.6 47	11.8	69.8F 21.0C	8.2 197	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
F5 5100.00 REDWOOD CREEK AT ORICK																								
10/01/73 1430	5050 5050	5.06 64	10.8 115	65.3F 18.5C	7.4 7.7	220 218	--	--	6.4 .28 13	--	0 .00	89 1.46	--	5.0 .14	--	.10	--	--	--	--	--	96	1A 0.3	
11/13/73 1545	5050 5050	12.65 10500	12.1 107	50.0F 10.0C	7.3 7.5	63 68	8.9 .44 64	1.0 .08 12	2.8 .12 17	2.0 .05 7	0 .00	26 .43 63	8.4 .17 25	2.6 .07 10	.4 .01 1	.00	--	63 39	26 5	380A 0.2	E T			
12/11/73 1030	5050 5050	8.75 2800	12.7 110	48.2F 9.0C	7.2 70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	162AF		
01/15/74 0830	5050 5050	11.10 6730	12.0 107	50.9F 10.5C	8.4 6.7	63 67	--	--	2.7 .12 19	--	0 .00	27 .44	--	1.6 .05	--	.10	--	--	--	--	--	26	320A 0.2	
02/04/74 1420	5050 5050	2.76 1500E	12.5 108	48.2F 9.0C	7.3 81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	60AF		
03/04/74 1600	5050 5050	8.89 2930	13.0 112	48.2F 9.0C	7.1 71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	90AF		
04/01/74 1435	5050 5050	16.93 24200	12.3 107	49.1F 9.5C	7.4 8.0	57	--	3.0 .13 18	--	0 .00	27 .44	--	2.5 .07	--	.10	--	--	29	1600A 0.2					
05/13/74 1450	5050 5050	6.14 317	11.0 109	59.0F 15.0C	7.4 118	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4AF		
06/10/74 1435	5050	5.76 165	10.0 111	69.8F 21.0C	8.4 143	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
07/09/74 0840	5050	5.52 105	9.2 91	59.0F 15.0C	7.2 162	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
08/05/74 1445	5050	5.14 40	--	62.6F 17.0C	7.4 161	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
09/03/74 1415	5050	5.00 23	10.7 117	68.0F 20.0C	7.9 160	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
F6 1100.00 EEL RIVER AT SCOTIA																								
10/02/73 1150	5050 5000	9.35 123	12.2 123	60.8F 16.0C	7.9 8.3	304 301	37 1.85 58	11 .90 28	9.2 .40 13	1.4 .04 1	0 .00	151 2.47 78	24 .50 16	6.8 .19 6	--	.01	.2 7.5	172 171	140 14	1A 0.3				
11/14/73 1400	5050 5000	12.1 71400	12.1 112	53.6F 12.0C	7.9 117	109 117	14 .70 58	3.6 .30 25	3.9 .17 14	1.1 .03 3	0 .00	59 .97 84	5.6 .12 18	2.3 .06 5	--	.06	.1 11.0	71	50 2	200A 0.2				
12/11/73 1415	5050 5000	12.5 14000	10.8 108	48.2F 9.0C	7.4 138	19 .95 61	4.7 .39 25	4.9 .21 13	.8 .02 1	0 .00	69 1.13 80	8.6 .18 13	4.0 .11 8	--	.04	.2 11.0	88 87	67 11	50A 0.3					
01/16/74 0905	5050 5000	12.5 321000	11.2 112	50.9F 10.5C	7.6 96	11 .55 55	3.0 .25 25	4.0 .17 17	1.2 .03 3	0 .00	53 .87	4.1 .09 9	1.5 .04 4	--	.03	.1 7.6	61 58	40 0	200A 0.3					

TABLE D-2 cont
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLE# LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN								MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER				MILLIGRAMS PER LITER			
						CA	MG	NA	K	CO3	PERCENT REACTANCE VALUE		B	F	TDS SUM	TH NCM	TURB SAR	REM			
											MC03	SO4							CL	NO3	
F6 1100.00 EEL RIVER AT SCOTIA						CONTINUED															
02/05/74	5050		12.1	47.3F	7.6	19	5.7	5.3	.9	--	82	9.1	2.6	--	.05	.1	96	71	80A		
1600	5000	8700	10.3	8.5C		164	.95 57	.47 28	.23 14	.02 1	1.34	.19	.07		12.0				0.3		
03/05/74	5050		12.3	47.3F	7.6	18	5.3	4.6	1.0	--	76	7.0	2.5	--	.04	.1	89	67	100A		
1335	5000	24800	10.5	8.5C		149	.90 57	.44 28	.20 13	.03 2	1.25	.15	.07		12.0				0.2		
04/02/74	5050		12.3	50.0F	8.0	143	13	3.2	3.6	1.0	--	57	4.9	1.7	--	.04	.1	67	46	600A	
1245	5000	98200	10.9	10.0C		108	.65 59	.26 24	.16 15	.03 3	.93	.10	.05		9.7				0.2		
05/14/74	5050		11.0	62.6F	8.3	188	23	6.3	5.1	1.0	--	98	12	3.0	--	.07	.1	110	84	10A	
1245	5000	11300	11.3	17.0C		183	1.15 60	.52 27	.22 11	.03 2	1.61	.25	.08		11.0				0.2		
06/11/74	5050		8.4	73.4F	7.9	227	29	7.7	5.9	1.3	--	121	13	3.4	--	.09	.1	130	100	1A	
1255	5000	1050	10.2	23.0C		229	1.45 61	.63 27	.26 11	.03 1	1.98	.27	.10		9.5				0.3		
07/09/74	5050		10.3	68.0F	8.1	279	41	9.8	7.0	1.4	--	155	19	4.3	--	.11	.1	170	140	1A	
1230	5000	540	10.9	26.0C		286	2.05 64	.81 25	.30 9	.04 1	2.54	.40	.12		10.0				0.3		
08/06/74	5050		70.7F	21.5C	7.9	296	--	--	--	--	--	--	--	--	--	--	--	--	0AF		
1225	5000	240																			
09/04/74	5050		10.3	64.4F	8.0	317	39	10	9.8	1.5	--	169	20	6.3	--	.14	.1	179	140	1A	
1210	5000	150	10.8	18.0C		314	1.95 60	.82 25	.43 13	.04 1	2.77	.42	.18		8.4				0.4		
F6 1154.50 EEL RIVER AT SOUTH FORK																					
10/02/73	5050		12.0	63.5F	7.9	297	--	--	8.7	--	0	135	--	6.3	--	.20	--	--	130	0A	
1245	5050	74E	12.6	17.5C	7.9	296			.38 13		.00	2.21		.18		--	--	--	0.3		
11/14/73	5050		12.6	51.8F	8.3	105	17	3.0	3.5	2.1	0	63	7.4	.5	.6	.10	--	96	55	320A	
1500	5050	30400E	11.4	11.0C	8.0	121	.85 65	.25 19	.15 12	.05 4	.00	1.03 86	.15 13	.01 1	.01 1	--	--	65	4	0.2	
12/11/73	5050		12.6	46.2F	7.5	132	--	--	--	--	--	--	--	--	--	--	--	--	54AF		
1510	5050	7670E	10.9	9.0C																	
02/06/74	5050		13.0	42.8F	7.6	162	--	--	--	--	--	--	--	--	--	--	--	--	59AF		
0840	5050	1200E	10.5	6.0C																	
03/05/74	5050		13.3	49.1F	7.9	133	--	--	--	--	--	--	--	--	--	--	--	--	162AF		
1430	5050	12300E	11.7	9.5C																	
04/02/74	5050		12.6	50.0F	8.2	108	--	--	3.4	--	0	59	--	.9	--	.10	--	49	650A		
1340	5050	42500E	11.2	10.0C	8.3	108			.15 13		.00	.97		.03		--	--	--	0.2		
05/14/74	5050		10.3	62.6F	7.7	170	--	--	--	--	--	--	--	--	--	--	--	--	15AF		
1350	5050	1880	10.6	17.0C																	
06/11/74	5050		8.3	75.2F	8.0	202	--	--	--	--	--	--	--	--	--	--	--	--	2AF		
1315	5050	636	9.8	24.0C																	
07/09/74	5050		9.0	69.8F	8.0	271	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
1335	5050	220	10.1	21.0C																	
08/06/74	5050		73.4F	23.0C	8.0	285	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
1315	5050	96																			
09/04/74	5050		9.4	69.8F	7.8	304	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
1255	5050	48	10.5	21.0C																	
F6 1329.50 EEL RIVER ABOVE OUTLET CREEK NEAR DOS RIOS																					
10/03/73	5050		11.4	60.8F	8.0	252	--	--	--	--	--	--	--	--	--	--	--	--	0AF		
0845	5050	4.8	11.9	16.0C																	
11/15/73	5050		11.2	53.6F	7.9	113	14	4.1	3.9	.9	0	61	8.9	.9	--	.10	--	75	52	110A	
1200	5050	4850	10.7	12.0C	7.8	120	.70 57	.34 28	.17 14	.02 2	.00	1.00 82	.19 16	.03 2	--	--	--	63	2	0.2	
12/12/73	5050		12.3	46.4F	7.5	120	--	--	--	--	--	--	--	--	--	--	--	--	31AF		
0945	5050	2090	11.1	8.0C																	
01/23/74	5050		12.7	44.6F	7.4	111	--	--	--	--	--	--	--	--	--	--	--	--	144AF		
1040	5050	3820	10.8	7.0C																	
02/06/74	5050		13.3	41.9F	8.2	132	--	--	--	--	--	--	--	--	--	--	--	--	69AF		
1205	5050	1120	10.9	5.5C																	
03/06/74	5050		11.9	50.0F	7.1	158	--	--	--	--	--	--	--	--	--	--	--	--	63AF		
1045	5050	3240	10.0	15.0C																	
04/03/74	5050		12.5	46.4F	7.6	103	--	--	3.7	--	0	55	--	1.2	--	.00	--	46	270A		
0810	5050	8290	10.9	8.0C	8.0	103			.16 15		.00	.90		.03		--	--	--	0.2		

TABLE D-2 cont
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	NO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER					MILLIGRAMS PER LITER				
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	PERCENT REACTANCE VALUE	θ	F	TDS SUM	TH NCH	TURB SAR	REH				
F6		1329.50	EEL RIVER ABOVE OUTLET CREEK NEAR DOS RIOS										CONTINUED												
05/15/74	5050		10.2	59.0F	7.9	183	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6AF			
0805	5050	311	104	15.0C																					
06/12/74	5050		8.0	74.3F	7.9	229	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF			
0815		115	97	23.5C																					
07/10/74	5050		8.4	68.0F	8.0	233	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF			
0745		143	95	20.0C																					
08/07/74	5050			71.6F	7.9	236	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF			
0755		12		22.0C																					
09/05/74	5050		7.1	68.0F	8.2	229	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0AF			
0720		7.5	80	20.0C																					
F6		1350.00	OUTLET CREEK NEAR LONGVALE																						
10/03/73	5050	1.05	10.1	57.2F	7.9	357	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF			
0825	5050	1.2	101	14.0C																					
11/15/73	5050	5.12	11.2	53.6F	8.4	81	6.9	4.1	4.2	1.0	0	42	3.4	3.0	.5	.10	--	61	34	18A	E				
1225	5050	1590	107	12.0C	7.1	84	.34	.34	.18	.03	.00	.69	.07	.08	.01	--	44	0	0.3	0.3	T				
							38	38	20	3		81	8	9	1										
12/12/73	5050	4.05	12.4	48.2F	7.3	92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	33AF			
0920	5050	888	111	9.0C																					
01/23/74	5050	3.75	12.9	44.8F	7.2	98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18AF			
1015	5050	718	109	7.0C																					
02/06/74	5050	2.94	13.4	41.0F	7.6	120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7AF			
1145	5050	344	108	5.0C																					
03/06/74	5050	3.97	12.5	50.0F	7.3	101	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14AF			
1105	5050	842	114	10.0C																					
04/03/74	5050		11.9	48.2F	7.3		--	--	3.5	--	0	39	--	2.8	--	.10	--	--	--	--	--	32			
0740	5050	2760	106	9.0C	8.0	75			.15		.00	.64		.08								95A			
									19													0.3			
05/15/74	5050	3.34	10.1	59.0F	7.6	187	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF			
0740	5050	513	103	15.0C																					
06/12/74	5050	2.61	7.3	71.6F	7.9	234	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF			
0755		230	86	22.0C																					
07/10/74	5050	2.75	7.7	66.2F	8.1	268	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF			
0725		275	85	19.0C																					
08/07/74	5050	2.48		73.4F	8.0	275	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF			
0735		192		23.0C																					
09/05/74	5050	2.39	8.1	66.2F	8.0	293	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF			
0700		169	90	19.0C																					
F6		3009.01	EEL RIVER MIDDLE FORK AT DOS RIOS																						
10/03/73	5050	6.27	12.2	59.0F	7.9	337	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF			
0930	5050	25	124	15.0C																					
11/15/73	5050	13.08	12.9	49.1F	8.0	106	15	3.5	3.0	1.2	0	58	7.7	.0	--	.00	--	96	52	130A	E				
0800	5050	7450	116	9.5C	7.6	114	.75	.29	.13	.03	.00	.95	.16	.00	--	--	--	59	5	0.2	T				
							63	24	11	3		86	14												
12/12/73	5050	11.10	13.7	43.7F	7.8	130	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	51AF			
1015	5050	3440	114	6.5C																					
01/23/74	5050	11.63	13.5	42.8F	7.6	143	--	--	3.4	--	0	76	--	.9	--	.00	--	--	--	--	--	68			
1115	5050	4370	111	6.0C	8.1	151			.15		.00	1.25		.03								240A			
									10													0.2			
02/06/74	5050	9.16	14.1	40.1F	7.8	176	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	48AF			
1240	5050	1220	112	4.5C																					
03/06/74	5050	10.97		46.4F	7.9	156	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	108AF			
0720	5050	5040		8.0C																					
04/03/74	5050	13.67	13.3	44.6F	7.8		--	--	3.4	--	0	67	--	1.1	--	.00	--	--	--	--	--	60			
0840	5050	9030	113	7.0C	8.1	124			.15		.00	1.10		.03								170A			
									11													0.2			
05/15/74	5050	9.72	11.2	53.6F	7.9	146	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25AF			
0835	5050	1730	107	12.0C																					
06/12/74	5050	8.57	8.7	68.0F	7.8	175	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3AF			
0845		793	98	20.0C																					

TABLE D-2 cont
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. D DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER										MILLIGRAMS PER LITER					REMARKS
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	8	F	TDS SUM	TH NCH	TURB SAR		
F6 3009.01 EEL RIVER MIDDLE FORK AT DOS RIOS						CONTINUED															
07/10/74 0820	5050	7.29 549	9.0 98	65.3F 18.5C	7.9 247	--	--	--	--	--	--	--	--	--	--	--	--	--	2AF		
08/07/74 0820	5050	7.53 300		71.6F 22.0C	8.0 304	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
09/05/74 0745	5050	11.56 232	8.8 99	68.0F 20.0C	7.9 318	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
F6 3050.00 MILL CREEK NEAR COVELO																					
11/15/73 0615	5050 5050		11.1 103	50.9F 10.5C	8.1 114	12 .60	4.6 .38	3.9 .17	1.1 .03	0 .00	57 .93	6.1 .13	.9 .03	--	.00	--	71 57	49 3	704 0.2		
12/12/73 1110	5050 5050		12.3 150E	46.4F 10.0C	7.4 169	--	--	--	--	--	--	--	--	--	--	--	--	--	13AF		
01/23/74 1215	5050 5050		12.4 200E	43.7F 6.5C	7.3 173	--	--	--	--	--	--	--	--	--	--	--	--	--	31AF		
02/06/74 1330	5050 5050		12.7 100E	43.7F 6.5C	7.5 210	--	--	--	--	--	--	--	--	--	--	--	--	--	8AF		
03/06/74 0825	5050 5050		12.4 150E	47.3F 8.5C	7.4 174	--	--	--	--	--	--	--	--	--	--	--	--	--	17AF		
04/03/74 0930	5050 5050		12.0 105	46.4F 8.0C	7.4 145 7.8 144	--	--	4.4 .19 13	--	0 .00	80 1.31	--	.9 .03	--	.00	--	--	65 0.2	1104		
05/15/74 0925	5050 5050		10.2 40E	59.0F 15.0C	8.0 306	--	--	--	--	--	--	--	--	--	--	--	--	--	14AF		
06/12/74 0940	5050		7.6 20E	73.4F 23.0C	7.6 344	--	--	--	--	--	--	--	--	--	--	--	--	--	14AF		
07/10/74 0905	5050 5050		7.1 6E	67.1F 19.5C	7.4 327 8.2 331	--	--	9.8 .43 13	--	0 .00	187 3.06	--	5.0 .14	--	.10	--	--	150 0.3	0A		
F6 3200.00 BLACK BUTTE RIVER NEAR COVELO																					
10/03/73 1045	5050 5050		11.50 21	11.9 126	65.8F 16.0C	8.1 300 7.9 302	--	--	6.6 .29 9	--	0 .00	124 2.03 98	--	1.8 .05 .2	.3 .00	.00	--	144	0A 0.2		
11/15/73 1010	5050 5050		13.50 596	12.6 117	50.0F 10.0C	8.4 110 7.6 116	17 .85 75	1.8 .15 13	2.8 .12 11	.8 .02	0 .00	54 .89 82	7.6 .16 15	.9 .03 3	.10	--	84 58	50 6	24A 0.2		
12/12/73 1215	5050 5050		12.97 717	13.7 114	41.9F 5.5C	7.5 127	--	--	--	--	--	--	--	--	--	--	--	--	21AF		
01/23/74 1305	5050 5050		15.53 3960	13.0 111	43.7F 6.5C	8.0 140 8.2 151	--	--	3.2 .14 9	--	0 .00	71 1.16	--	.9 .03	.20	--	68	420A 0.2			
02/06/74 1420	5050 5050		15.52 3060	13.2 128	41.0F 5.0C	7.6 176	--	--	--	--	--	--	--	--	--	--	--	--	90AF		
03/06/74 0925	5050 5050		15.52 687	13.2 115	45.5F 7.5C	7.8 165	--	--	--	--	--	--	--	--	--	--	--	--	148AF		
04/03/74 1100	5050 5050		15.52 786	13.1 110	42.8F 6.0C	7.8 126 8.1 126	--	--	3.4 .15 11	--	0 .00	65 1.07	--	1.2 .03	.10	--	58	580A 0.2			
05/15/74 1010	5050 5050		12.35 211	11.3 107	51.8F 11.0C	7.6 145	--	--	--	--	--	--	--	--	--	--	--	--	15AF		
06/12/74 1020	5050		11.62 77	8.3 94	67.1F 19.5C	7.9 201	--	--	--	--	--	--	--	--	--	--	--	--	2AF		
07/10/74 0950	5050		11.35 45	8.8 97	64.4F 18.0C	8.0 250	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
08/07/74 0945	5050		10.44 8.1		74.3F 23.5C	8.0 289	--	--	--	--	--	--	--	--	--	--	--	--	1AF		
09/05/74 0910	5050		10.41 7.2	9.5 111	69.8F 21.0C	8.0 316	--	--	--	--	--	--	--	--	--	--	--	--	0AF		

TABLE D-2 cont
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN								MILLIGRAMS PER LITER					MILLIGRAMS PER LITER			HEM		
						CA	MG	NA	K	CO3	MCO3	SO4	CL	NO3	H	F	TDS SUM	TH NCH	TURB SAR					
F6		4100.00	EEL RIVER SOUTH FORK NEAR MIRANDA																					
10/02/73	5050	3.86	13.9	63.5F	8.1	257	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF	
1320	5050	74	146	17.5C																				
11/14/73	5050	12.53	12.2	53.6F	8.2	92	10	3.2	4.4	1.5	0	46	4.0	4.3	--	.00	--	64	38	240A				
1550	5050	14400	114	12.0C	8.1	96	.50	.26	.19	.04	.00	.75	.08	.12				50	1	0.3				T
12/11/73	5050	8.03	12.2	50.0F	8.1	117	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	102AF	
1555	5050	4100	109	10.0C																				
01/16/74	5050	34.52	12.5	50.9F	7.2	64	--	--	3.9	--	0	39	--	1.8	--	.50	--	--	--	--	--	38	3200A	
1100	5050	122000	113	10.5C	6.8	78			.17		.00	.64		.05									0.3	
02/06/74	5050	6.89	13.4	43.7F	7.3	129	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	61AF	
0915	5050	1600	109	6.5C																				
03/05/74	5050	8.72	12.3	50.0F	7.3	113	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	129AF	
1520	5050	4500	109	10.0C																				
04/02/74	5050	12.14	11.7	52.7F	7.6		--	--	4.6	--	0	48	--	3.5	--	.10	--	--	--	--	--	38	1500A	
1520	5050	13000	108	11.5C	8.2	88			.20		.00	.79		.10									0.3	
05/14/74	5050	5.60	11.4	62.6F	8.2	186	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF	
1420	5050	850	118	17.0C																				
06/11/74	5050	3.44	10.3	77.0F	8.3	208	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF	
1420	5050	325	124	25.0C																				
07/09/74	5050	5.20	10.0	71.6F	8.3	234	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF	
1510	5050	270	114	22.0C																				
08/06/74	5050	4.58		80.6F	8.1	252	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2AF	
1345	5050	67		27.0C																				
09/04/74	5050	4.53	12.5	75.2F	8.2	251	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF	
1330	5050	55	148	24.0C																				
F6		5279.00	VAN DUZEN RIVER NEAR BRIOGEVILLE																					
10/02/73	5050	3.53	12.1	59.0F	7.8	265	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF	
1050	5050	28	121	15.0C																				
11/14/73	5050	9.70	12.1	50.0F	8.1	92	13	3.0	3.2	2.3	0	50	7.6	.9	.5	.00	--	86	45	260A				
1230	5050	6200	108	10.0C	7.9	99	.65	.25	.14	.06	.00	.82	.16	.03	.01			55	4	0.2				E T S
							.59	.23	.13	.05		.80	.16	.03	.01									
12/11/73	5050	7.12	13.0	48.2F	7.4	109	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	170AF	
1320	5050	1980	113	9.0C																				
02/05/74	5050	5.46	13.5	43.7F	7.2	120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	49AF	
1505	5050	900	111	6.5C																				
03/05/74	5050	6.66	13.4	47.3F	7.3	108	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	105AF	
1150	5050	2710	116	8.5C																				
04/02/74	5050	9.11	12.8	45.5F	7.6		--	--	3.0	--	0	52	--	1.1	--	.00	--	--	--	--	--	43	550A	
1130	5050	5700	108	7.5C	8.3	95			.13		.00	.85		.03									0.2	
05/14/74	5050	4.75	10.6	59.0F	7.8	162	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF	
1150	5050	195	106	15.0C																				
06/11/74	5050	4.31	8.9	72.5F	8.1	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF	
1150	5050	74	103	22.5C																				
07/09/74	5050	4.20	9.6	67.1F	8.0	233	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF	
1120	5050	57	105	19.5C																				
08/06/74	5050	3.83		71.6F	8.2	258	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF	
1135	5050	19		22.0C																				
09/04/74	5050	3.67	9.8	68.0F	8.0	282	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1AF	
1100	5050	10	108	20.0C																				
F7		1100.00	MATTOLE RIVER NEAR PETROLIA																					
02/05/74	5050	4.49	12.7	48.2F	7.6	130	15	3.0	5.8	.8	0	58	9.7	2.9	.2	.20	--	82	51	120A				
1310	5050	1350	110	9.0C	7.3	120	.75	.25	.25	.02	.00	.95	.20	.08	.00			66	3	0.4				
							.59	.20	.20	.02		.77	.16	.07										

TABLE D-2 cont
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY		MINERAL CONSTITUENTS IN						MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER					MILLIGRAMS PER LITER				REMARKS
					PH	EC	CA	MG	NA	K	CO ₃	HCO ₃	SO ₄	CL	NO ₃	P	F	TDS SUM	TH NCH	TURB SAR		
		F7	5100.00	HEAR RIVER AT CAPETOWN																		
02/05/74	5050		12.9	46.4F	7.4	160	20	3.2	6.7	1.5	0	60	18	5.5	.8	.10	--	98	62	180A		
1200	5050	300E	108	8.0C	7.4	159	1.00 63	.26 16	.29 18	.04 3	.00	.98 64	.37 24	.16 11	.01 1	--	85	14	0.4			

TABLE D-3

MINOR ELEMENT ANALYSIS OF SURFACE WATER

Lab and Sampler Agency Codes

- 5000 - U. S. Geological Survey
- 5050 - Department of Water Resources

Abbreviations

- TIME - Pacific Standard Time on a 24-hour clock
- DISCH - Instantaneous discharge in cubic feet per second
- EC - Electrical conductance in micromhos at 25° Celsius
- TEMP - Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)
- PH - Measure of acidity (<7) or alkalinity (>7) of water
- CHROM (ALL) - All chromium
- CHROM (HEX) - Hexavalent chromium
- D - Dissolved
- T - Total

TABLE D-3
MINOR ELEMENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	CONSTITUENTS IN MILLIGRAMS PER LITER							LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
					ARSENIC	BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON							
F0 1300.00 SMITH RIVER NEAR CRESCENT CITY															
04/02/74 0700	5050 5050			8.0C 7.4	--	-- 0.00 T	--	0.01 5.1 T	T	0.01 0.04 T	--	--	0.01 T		
F2 1050.00 SHASTA RIVER NEAR YREKA															
05/07/74 1120	5050 5050			18.5C 8.2	--	-- 0.00 T	--	0.01 0.26 T	T	0.00 0.01 T	--	--	0.02 T		
F2 5250.00 SCOTT RIVER NEAR FORT JONES															
05/07/74 1430	5050 5050			12.5C 7.5	--	-- 0.00 T	--	0.01 3.5 T	T	0.00 0.08 T	--	--	0.01 T		
F3 1100.00 KLAMATH RIVER NEAR KLAMATH															
10/02/73 0810	5050 5000		219	15.5C 7.8	--	--	--	-- 0.00 O		--	--	--	--		
11/13/73 1635	5050 5000		102	9.0C 7.3	--	--	--	-- 0.060 D		--	--	--	--		
12/11/73 0935	5050 5000			6.5C 7.4	--	--	--	-- 0.050 D		--	--	--	--		
01/15/74 0935	5050 5000			8.0C 8.0	--	--	--	-- 0.050 D		--	--	--	--		
02/05/74 0855	5050 5000			6.0C 7.5	--	--	--	-- 0.020 D		--	--	--	--		
03/05/74 0835	5050 5000			8.0C 7.7	--	--	--	-- 0.040 D		--	--	--	--		
04/02/74 0845	5050 5050			8.0C 7.9	--	-- 0.00 T	--	0.06 41. T	T	0.00 0.92 T	--	--	0.08 T		
05/14/74 0915	5050 5000		122	11.5C 8.3	--	--	--	-- 0.05 D		--	--	--	--		
06/11/74 0910	5050 5000		107	17.0C 7.4	--	--	--	-- 0.040 D		--	--	--	--		
07/09/74 0750	5050 5000		149	17.0C 7.5	--	--	--	-- 0.020 D		--	--	--	--		
08/06/74 0830	5050 5000		175	215.3 76.0	--	--	--	-- 0.030 D		--	--	--	--		
09/04/74 0810	5050 5000		206	20.0C 7.9	--	--	--	-- 0.0020 D		--	--	--	--		
F3 1220.01 KLAMATH RIVER AT ORLEANS															
04/01/74 1145	5050 5050			8.0C 7.7	--	-- 0.01 T	--	0.08 30. T	T	0.00 0.64 T	--	--	0.05 T		
F3 1430.00 KLAMATH RIVER NEAR SEIAD VALLEY															
05/07/74 1320	5050 5050			14.0C 8.4	--	-- 0.00 T	--	0.01 2.2 T	T	0.01 0.06 T	--	--	0.01 T		
F3 1599.01 KLAMATH RIVER BELOW IRON GATE DAM															
05/07/74 1030	5050 5050			14.0C 7.6	--	-- 0.00 T	--	0.00 0.41 T	T	0.00 0.02 T	--	--	0.01 T		
F4 1080.00 TRINITY RIVER AT HOOPA															
04/01/74 1040	5050 5050			7.5C 8.3	--	-- 0.01 T	--	0.10 48. T	T	0.01 1.1 T	--	--	0.28 T		
F4 1376.00 TRINITY RIVER NEAR HUNNT RANCH															
05/13/74 0905	5050 5050			11.0C 7.4	--	-- 0.00 T	--	0.01 0.59 T	T	0.00 0.02 T	--	--	0.02 T		
F4 1640.00 TRINITY RIVER AT LEWISTON															
05/16/74 1235	5050 5050		71	8.5C 7.3	--	-- 0.00 T	--	0.00 0.46 T	T	0.00 0.01 T	--	--	0.00 T		
F5 1100.00 MAD RIVER NEAR ARCATA															
05/13/74 1350	5050 5050			16.0C 8.2	--	-- 0.00 T	--	0.00 0.10 T	T	0.00 0.01 T	--	--	0.00 T		
F5 5100.00 REDWOOD CREEK AT ORICK															
04/01/74 1435	5050 5050			9.5C 7.4	--	-- 0.01 T	--	0.37 228. T	T	0.12 5.0 T	--	--	0.67 T		
F6 1100.00 EEL RIVER AT SCOTIA															
10/02/73 1150	5050 5000		304	16.0C 7.9	--	--	--	-- 0.010 O		--	--	--	--		
11/14/73 1400	5050 5000		109	12.0C 7.9	--	--	--	-- 0.060 O		--	--	--	--		
12/11/73 1415	5050 5000			9.0C 7.4	--	--	--	-- 0.040 O		--	--	--	--		
01/16/74 0905	5050 5000			10.5C 7.6	--	--	--	-- 0.080 O		--	--	--	--		
02/05/74 1600	5050 5000			8.5C 7.6	--	--	--	-- 0.020 O		--	--	--	--		
03/05/74 1335	5050 5000			8.5C 7.6	--	--	--	-- 0.020 O		--	--	--	--		

TABLE D-3 cont
MINOR ELEMENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	CONSTITUENTS IN MILLIGRAMS PER LITER		LEAD	MERCURY	SILVER	ZINC	REM
						BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	MANGANESE	SELENIUM		
F6 1100.00			EEL RIVER AT SCOTIA				CONTINUED					
04/02/74 1245	5050 5050			10.0C 8.0	--	-- 0.01 T	--	0.12 T 93.	0.02 T 1.9 T	--	--	0.22 T
05/14/74 1245	5050 5000	188		17.0C 8.3	--	--	--	-- 0.02 O	--	--	--	--
06/11/74 1255	5050 5000	227		23.0C 7.9	--	--	--	-- 0.020 O	--	--	--	--
07/09/74 1230	5050 5000	279		20.0C 8.1	--	--	--	-- 0.010 D	--	--	--	--
09/04/74 1210	5050 5000	317		18.0C 8.0	--	--	--	-- 0.020 D	--	--	--	--
F6 1154.50			EEL RIVER AT SOUTH FORK									
04/02/74 1340	5050 5050			10.0C 8.2	--	-- 0.01 T	--	0.07 T 77.	0.01 T 1.6 T	--	--	0.49 T
F6 1329.50			EEL RIVER ABOVE OUTLET CREEK NEAR DOS RIOS									
04/02/74 1340	5050 5050			10.0C 8.2	--	-- 0.00 T	--	0.03 T 26.	0.00 T 0.51 T	--	--	0.08 T
F6 1350.00			OUTLET CREEK NEAR LONGVALE									
04/03/74 0740	5050 5050			9.0C 7.3	--	-- 0.00 T	--	0.01 T 5.9 T	0.00 T 0.03 T	--	--	0.01 T
F6 3009.01			EEL RIVER MIDDLE FORK AT DOS RIOS									
04/03/74 0840	5050 5050			7.0C 7.8	--	-- 0.01 T	--	0.05 T 49.	0.01 T 0.96 T	--	--	0.54 T
F6 3200.00			BLACK BUTTE RIVER NEAR COVELO									
04/03/74 1100	5050 5050			6.0C 7.8	--	-- 0.01 T	--	0.07 T 62.	0.06 T 1.1 T	--	--	0.35 T
F6 4100.00			EEL RIVER SOUTH FORK NEAR MIRANDA									
04/02/74 1420	5050 5050			11.5C 7.6	--	-- 0.01 T	--	0.06 T 66.	0.02 T 1.3 T	--	--	1.3 T
F6 5279.00			VAN DUZEN RIVER NEAR BRIDGEVILLE									
04/02/74 1130	5050 5050			7.5C 7.6	--	-- 0.01 T	--	0.06 T 64.	0.39 T 1.2 T	--	--	0.21 T

TABLE D-4

SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF SURFACE WATER

Lab and Sampler Agency Codes

5000 - U. S. Geological Survey

5050 - Department of Water Resources

Abbreviations

- TIME - Pacific Standard Time on a 24-hour clock
- DISCH - Instantaneous discharge in cubic feet per second
- EC - Electrical conductance in micromhos at 25° Celsius
- TEMP - Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)
- PH - Measure of acidity (<7) or alkalinity (>7) of water
- D - Dissolved
- T - Total

TABLE D-4
SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	CONSTITUENTS IN MILLIGRAMS PER LITER					LITHIUM MOLYBDENUM	NICKEL STRONTIUM	TITANIUM VANADIUM	REP
					ALUMINUM	ANTIMONY BERYLLIUM	BISMUTH COBALT	GALLIUM GERMANIUM					
F3 1100.00			KLAMATH RIVER NEAR KLAMATH										
10/02/73 0810	5050 5000		219	15.5C 7.8	--	--	--	--	0.00 --	D	-- 0.0160	D	--
11/13/73 1635	5050 5000		102	9.0C 7.3	--	--	--	--	0.00 --	D	-- 0.080	D	--
12/11/73 0935	5050 5000			6.5C 7.4	--	--	--	--	0.000 --	D	-- 0.090	D	--
01/15/74 0935	5050 5000			8.0C 8.0	--	--	--	--	0.000 --	D	-- 0.060	D	--
02/05/74 0855	5050 5000			6.0C 7.5	--	--	--	--	0.000 --	D	-- 0.060	D	--
03/05/74 0835	5050 5000			8.0C 7.7	--	--	--	--	0.00 --	D	-- 0.090	D	--
04/02/74 0845	5050 5000		152	8.0C 7.9	--	--	--	--	0.20 --	D	-- 0.60	D	--
05/14/74 0915	5050 5000		122	11.5C 8.3	--	--	--	--	0.00 --	D	-- 0.080	D	--
06/11/74 0910	5050 5000		107	17.0C 7.4	--	--	--	--	0.00 --	D	-- 0.08	D	--
07/09/74 0750	5050 5000		149	17.0C 7.5	--	--	--	--	0.000 --	D	-- 0.110	D	--
08/06/74 0830	5050 5000		175	215.3 76.0	--	--	--	--	0.0000 --	D	-- .0010	D	--
09/04/74 0810	5050 5000		206	20.0C 7.9	--	--	--	--	.0000 --	D	-- 0.0013	D	--
F6 1100.00			EEL RIVER AT SCOTIA										
10/02/73 1150	5050 5000		304	16.0C 7.9	--	--	--	--	0.00 --	D	-- 0.0460	D	--
11/14/73 1400	5050 5000		109	12.0C 7.9	--	--	--	--	0.00 --	D	-- 0.0180	D	--
12/11/73 1415	5050 5000			9.0C 7.4	--	--	--	--	0.000 --	D	-- 0.190	D	--
01/16/74 0905	5050 5000			10.5C 7.6	--	--	--	--	0.000 --	D	-- 0.110	D	--
02/05/74 1600	5050 5000			8.5C 7.6	--	--	--	--	0.000 --	D	-- 0.240	D	--
03/05/74 1335	5050 5000			8.5C 7.6	--	--	--	--	0.00 --	D	-- 0.0210	D	--
04/02/74 1245	5050 5000		143	10.0C 8.0	--	--	--	--	0.02 --	D	-- 0.14	D	--
05/14/74 1245	5050 5000		188	17.0C 8.3	--	--	--	--	0.00 --	D	-- 0.30	D	--
06/11/74 1255	5050 5000		227	23.0C 7.9	--	--	--	--	0.00 --	D	-- 0.32	D	--
07/09/74 1230	5050 5000		279	20.0C 8.1	--	--	--	--	0.000 --	D	-- 0.420	D	--
09/04/74 1210	5050 5000		317	18.0C 8.0	--	--	--	--	0.0000 --	D	-- .0044	D	--

TABLE D-5 NUTRIENT ANALYSIS OF SURFACE WATER

Lab and Sampler Agency Codes

- 5000 - U. S. Geological Survey
- 5050 - Department of Water Resources

Abbreviations

- TIME - Pacific Standard Time on a 24-hour clock.
- G.H. - Instantaneous gage height in feet above an established datum.
- Q - Instantaneous discharge measured in cubic feet per second (cfs). "E" indicates the value has been estimated.
- TEMP - Water temperature in degrees Fahrenheit (F) or Celsius (C).
- TURB - Jackson Turbidity Units measured with a Hellige Turbidimeter (E) or a Hach Nephelometer (A).
- PH - Measure of acidity or alkalinity of water.
- EC - Electrical conductance in micromhos at 25° C.
- HCO₃ - Bicarbonate
- CO₃ - Carbonate

Nitrogen Series as N

- NO₂ - Unfiltered nitrite
- NH₃ - Unfiltered ammonia
- NO₃ - Unfiltered nitrate
- ORG N - Organic nitrogen
- DIS ORG N - Dissolved organic nitrogen
- NH₃ + ORG N - Ammonia plus organic nitrogen

Phosphorus Series as P

- DIS A.H.PO₄ - Dissolved acid hydrolyzable phosphate
- D O-PO₄ - Dissolved orthophosphate
- T O-PO₄ - Total orthophosphate
- D TOT P - Dissolved total phosphorus
- TOT P - Total phosphorus

TABLE D-5 cont

DATE TIME	SAMP LAB	G.M. DISCH.	TEMP DEPTH	FIELD LABORATORY PH	NUTRIENT ANALYSIS OF SURFACE WATER					CONSTITUENTS IN MILLIGRAMS PER LITER						
					TURB F-CO ₂	FIELD CACO ₃	LAB P CO ₃	NO ₂	NO ₃	F ORG N	F (NH ₃ + U ORG N	F (NH ₃ + U ORG N	DIS A.H.P.O ₄	F H ₃ P.O ₄	F TOT P	U TOT P REM
F5 5100.00		REDWOOD CREEK AT ORICK														
04/01/74	5050	16.93	9.5C	7.4		1600A		27	--	--	--				0.02	--
1435	5050			8.0	57			0	--	0.07	--	--	--	--	--	3.1
F6 1109.00		EEL RIVER AT SCOTIA														
10/02/73	5050		16.9C	7.9	304			151	--	--	--				--	--
1150	5000			8.3				0	--	0.03	--	--	--	--	--	0.04
11/14/73	5050		12.0C	7.9	109				--	--	--				--	--
1400	5000								--	0.26	--	--	--	--	--	0.90
12/11/73	5050		9.0C	7.4		50A		69	--	--	--				--	--
1415	5000				138			0	--	0.13	--	--	--	--	--	0.12
01/16/74	5050		10.5C	7.6		200A		53	--	--	--				--	--
0905	5000				96			0	--	0.48	--	--	--	--	--	2.3
02/05/74	5050		8.5C	7.6		80A		82	--	--	--				--	--
1600	5000				160				--	0.14	--	--	--	--	--	0.12
03/05/74	5050		8.5C	7.6		100A		76	--	--	--				--	--
1335	5000				149				--	0.27	--	--	--	--	--	0.04
04/02/74	5050	27.82	10.0C	8.0					--	--	--				0.03	--
1245	5050								--	0.03	--	1.2	--	--	--	0.66
04/02/74	5050		10.0C	8.0	143	600A		57	--	--	--				--	--
1246	5000				108				--	0.36	--	--	--	--	--	1.2
05/14/74	5050		17.0C	8.3	188	10A		98	--	--	--				--	--
1245	5000				183				--	0.06	--	--	--	--	--	0.19
06/11/74	5050		23.0C	7.9	227	1A		121	--	--	--				--	--
1255	5000				229				--	0.03	--	--	--	--	--	0.00
07/09/74	5050		20.0C	8.1	279				--	--	--				--	--
1230	5000								--	0.03	--	--	--	--	--	0.02
09/04/74	5050		18.0C	8.0	317	1A			--	--	--				--	--
1210	5000			7.9	314				--	0.04	--	--	--	--	--	0.00
F6 1154.50		EEL RIVER AT SOUTH FORK														
04/02/74	5050		10.0C	8.2		650A		59	--	--	--				0.02	--
1340	5050			8.3	108			0	--	0.92	--	1.1	--	--	--	0.94
F6 1329.50		EEL RIVER ABOVE OUTLET CREEK NEAR DOS RIOS														
11/15/73	5050		12.0C	7.9	113	110A			--	--	--				0.01	--
1200	5050								--	0.08	--	--	--	--	--	--
04/02/74	5050		10.0C	8.2		270A		55	--	--	--				0.02	--
1340	5050			8.0	103			0	--	0.01	--	0.4	--	--	--	0.75
F6 1350.00		OUTLET CREEK NEAR LONGVALE														
04/03/74	5050		9.0C	7.3		95A		39	--	--	--				0.02	--
0740	5050			8.0	75			0	--	0.05	--	0.2	--	--	--	0.80
F6 3009.01		EEL RIVER MIDDLE FORK AT DOS RIOS														
11/15/73	5050	13.08	9.5C	8.0	106				--	--	--				0.01	--
0800	5050								--	0.12	--	--	--	--	--	--
01/23/74	5050	11.63	6.0C	7.6	143	240AF			--	--	--				0.01	--
1115	5050								--	0.07	--	--	--	--	--	--
04/03/74	5050	13.67	7.0C	7.8		170A		67	--	--	--				0.02	--
0840	5050			8.1	124			0	--	0.02	--	0.7	--	--	--	0.65
F6 3050.00		MILL CREEK NEAR COVELO														
11/15/73	5050		10.5C	8.1	108	70A			--	--	--				0.01	--
0915	5050								--	0.17	--	--	--	--	--	--
04/03/74	5050		8.0C	7.4	145	86AF			--	--	--				0.01	--
0930	5050								--	0.23	--	--	--	--	--	--
07/10/74	5050		19.5C	7.4	327	14F			--	--	--				0.00	--
0905	5050	6 E							--	0.02	--	--	--	--	--	--
F6 3200.00		BLACK BUTTE RIVER NEAR COVELO														
11/15/73	5050	13.50	10.0C	8.4	110	24A			--	--	--				0.01	--
1010	5050								--	0.07	--	--	--	--	--	--
01/23/74	5050	15.53	6.5C	8.0	140	1100AF			--	--	--				0.01	--
1305	5050								--	0.05	--	--	--	--	--	--
04/03/74	5050	15.52	6.0C	7.8		580A		65	--	--	--				0.02	--
1100	5050			8.1	126			0	--	0.02	--	0.9	--	--	--	1.4
F6 4100.00		EEL RIVER SOUTH FORK NEAR MIRANDA														
11/14/73	5050	12.53	12.0C	8.2	92	240A			--	--	--				0.01	--
1550	5050								--	0.17	--	--	--	--	--	--
04/02/74	5050	12.41	11.5C	7.6		1500A		48	--	--	--				0.03	--
1420	5050			8.2	88			0	--	0.03	--	0.8	--	--	--	0.65
F6 5279.00		VAN DUZEN RIVER NEAR BRIDGEVILLE														
04/02/74	5050	9.11	7.5C	7.6		550A		52	--	--	--				0.02	--
1130	5050			8.3	95			0	--	0.04	--	0.9	--	--	--	0.66

TABLE D-6

PESTICIDES IN SURFACE WATER

All samples were collected and analyzed for pesticides by the Department of Water Resources (5050).

All samples were analyzed for two groups of pesticides, chlorinated organic compounds and organic phosphorus compounds. All pesticides detected are included in Table D-6. Other pesticides in these groups were absent or below detectable levels.

Pesticides

- BHC - Benzene hexachloride
- DDT - Dichloro diphenyl trichloroethane
- ppDDD - Para para isomer of dichloro diphenyl dichloroethane
- ppDDT - Para para isomer of dichloro diphenyl trichloroethane

When two pesticides are reported together with a slash mark separating them (ppDDE/Dieldrin, Simazine/Atrazine, etc.), the reported concentration is an undifferentiated total of the two. Either of the two pesticides could make up the entire total.

TABLE D-6

PESTICIDES IN SURFACE WATER
COMPOUNDS REPORTED IN NANOGRAMS/LITER

DATE TIME	SAMP LAB	TEMP EC	DO PH	G.H. DEP DISCHARGE	PESTICIDES IN SURFACE WATER COMPOUNDS REPORTED IN NANOGRAMS/LITER			OTHER
					CHLORINATED	HYDROCARBON	ORGANIC PHOSPHORUS	
		F0	1300.00		SMITH RIVER NEAR CRESCENT CITY			
04/02/74 0700	5050 5050	8.0C 7.4	13.7 7.4	20.94	NONE	DETECTED	NONE	DETECTED
		F2	1050.00		SHASTA RIVER NEAR YREKA			
05/07/74 1120	5050 5050	1A.5C 8.2	9.8 8.2	3.68	NONE	DETECTED	NONE	DETECTED
		F2	5250.00		SCOTT RIVER NEAR FORT JONES			
05/07/74 1430	5050 5050	12.5C 7.5	10.5 7.5	9.51	NONE	DETECTED	NONE	DETECTED
		F3	1100.00		KLAMATH RIVER NEAR KLAMATH			
04/02/74 0845	5050 5050	8.0C 7.9	13.1 7.9	25.30	NONE	DETECTED	NONE	DETECTED
		F4	1080.00		TRINITY RIVER AT MOOPA			
04/01/74 1040	5050 5050	7.5C 8.3	12.9 8.3	31.84	NONE	DETECTED	NONE	DETECTED
		F5	5100.00		REDWOOD CREEK AT ORICK			
04/01/74 1435	5050 5050	9.5C 7.4	12.3 7.4	16.93	NONE	DETECTED	NONE	DETECTED
		F6	1100.00		EEL RIVER AT SCOTIA			
04/02/74 1245	5050 5050	10.0C 8.0	12.3 8.0	27.02	NONE	DETECTED	NONE	DETECTED
		F6	1154.50		EEL RIVER AT SOUTH FORK			
04/02/74 1340	5050 5050	10.0C 8.2	12.6 8.2		NONE	DETECTED	NONE	DETECTED
		F6	5279.00		VAN DUZEN RIVER NEAR BRIDGEVILLE			
04/02/74 1130	5050 5050	7.5C 7.6	12.8 7.6	9.11	NONE	DETECTED	NONE	DETECTED



APPENDIX E

GROUND WATER QUALITY

This appendix presents ground water quality data collected during the period from October 1, 1973, through September 30, 1974. The data were collected from a number of major ground water sources in the North Coastal area in cooperation with local agencies. During the 1973 water year, 96 wells were sampled in 10 ground water basins.

At the time of field sampling, pH, specific conductance, and temperature measurements are made. The results are compared with measurements made in previous years. If a substantial change is noted, the samples are submitted to the laboratory for further analyses.

Laboratory analyses of ground waters are performed in accordance with "Standard Methods for the Examination of Water and Waste Water", 13th Edition, 1971.

The Region and Basin and State Well Numbering Systems are described in Appendix C, "Ground Water Measurements".

TABLE E-1 MINERAL ANALYSES OF GROUND WATER

An explanation of column headings follows:

The LAB and SAMPLER agency code is as follows:

5050 - California Department of Water Resources

<u>TIME</u>	- Pacific Standard Time on a 24-hour clock.
<u>TEMP</u>	- Water temperature in degrees Fahrenheit or degrees Celsius. The computer prints out both.
<u>PH LAB & FIELD</u>	- Measure of acidity or alkalinity of water.
<u>EC LAB</u>	- The electrical conductance in micromhos at 25° Celsius.
<u>EC FIELD</u>	- The electrical conductance in micromhos at time of field sampling.
<u>TDS</u>	- Gravimetric determination of total dissolved solids at 180° Celsius.
<u>SUM</u>	- Total dissolved solids determined by addition of analyzed constituents.
<u>TH</u>	- Total hardness.
<u>NCH</u>	- Noncarbonate hardness.
<u>SAR</u>	- Sodium adsorption ratio.
<u>PERCENT REACTANCE</u>	
<u>VALUE</u>	- Determined by dividing the sum of the cations or anions in milliequivalents per liter into each constituent in milliequivalents per liter arriving at a percentage. For a partial analysis, an approximate value is determined by multiplying the electrical conductance by 0.01 and using that as the cation or anion sum.

The MINERAL CONSTITUENTS are as follows:

B	- Boron	K	- Potassium
CA	- Calcium	MG	- Magnesium
CL	- Chloride	NA	- Sodium
CO ₃	- Carbonate	NO ₃	- Nitrate
F	- Fluoride	SI ₂	- Silica
HCO ₃	- Bicarbonate	SO ₄	- Sulfate

TABLE E-1 cont
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY		MINERAL CONSTITUENTS IN								MILLIGRAMS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER					REM
			PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	R	F	TDS SUM	TH NCH	SAR				
1 1-03		NORTH COASTAL REGION BUTTE VALLEY																				
06/19/74 0835	5050 46N/01W-17801	M 54.0F 12.2C	8.3	350	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
06/19/74 0815	5050 46N/01W-17602	M 59.0F 15.0C	8.2 8.5	400 433	35 1.75 38	25 2.06 44	16 .70 15	5.0 .13 3	8.0 .27 6	221 3.62 78	17 .35 8	8.1 .23 5	10.0 .16 3	.00	--	234 233	192 0	0.5				
06/19/74 0735	5050 46N/01W-17L01	M 54.0F 12.2C	7.6	440	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
06/19/74 1310	5050 46N/01W-29F01	M 53.0F 11.7C	7.0 8.1	325 352	23 1.15 31	22 1.81 49	14 .61 17	4.0 .10 3	0 .00	163 2.67 70	40 .83 22	2.9 .08 2	14.0 .23 6	.00	--	223 200	146 15	0.5				
06/19/74 1320	5050 46N/01W-30Q01	M 54.0F 12.2C	7.0 8.4	312 336	21 1.05 30	22 1.81 52	11 .48 14	4.4 .11 3	4.0 .13 4	145 2.38 66	39 .81 22	2.0 .06 2	14.0 .23 6	.00	--	231 189	142 18	0.4				
06/19/74 1240	5050 46N/02W-13P01	M 54.0F 12.2C	7.1	450 448	--	--	--	--	--	--	--	9.7 .27	12.0 .19	--	--	--	--	143				
06/19/74 1345	5050 46N/02W-25R01	M 53.0F 11.7C	7.1	355	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
06/19/74 1340	5050 46N/02W-25R02	M 53.0F 11.7C	7.1	300 306	--	--	--	--	--	--	--	1.4 .04	--	--	--	--	--	132				
06/19/74 1405	5050 46N/02W-26P01	M 53.0F 11.7C	7.7	185	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
06/19/74 1400	5050 46N/02W-26002	M 54.0F 12.2C	7.0	300	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
06/19/74 1430	5050 46N/02W-34R01	M 52.0F 11.1C	8.1 8.3	145 150	13 .65 40	7.4 .61 38	6.9 .30 19	2.0 .05 3	0 .00	94 1.54 96	1.5 .03 2	1.0 .03 2	.6 .01 1	.00	--	105 79	63 0	0.4	T			
06/19/74 1455	5050 46N/02W-36K01	M 53.0F 11.7C	6.9 8.1	350 368	23 1.15 31	24 1.97 54	10 .44 12	3.8 .10 3	0 .00	134 2.20 62	40 .83 24	2.7 .08 2	28.0 .42 12	.00	--	252 195	156 46	0.3	T			
06/18/74 1715	5050 47N/02W-21M03	M 55.0F 12.8C	7.2	118	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
06/18/74 1600	5050 48N/01W-28F01	M 83.0F 28.3C	8.4	205 200	--	--	--	--	--	--	--	5.4 .15	--	.20	--	--	--	9				
06/18/74 1540	5050 48N/01W-28J01	M 63.0F 17.2C	7.7	420 411	--	--	--	--	--	--	--	5.6 .16	--	.10	--	--	--	153				
06/18/74 1520	5050 48N/01W-28J03	M 59.0F 15.0C	7.6 7.6	580 559	--	--	--	--	0 .00	282 4.62 92	--	5.6 .16 3	10.0 .26 5	--	--	--	--	217				
06/18/74 1620	5050 48N/01W-31M01	M 57.0F 13.9C	6.9 8.0	495 482	34 1.70 38	26 2.14 47	14 .61 13	3.0 .08 2	0 .00	103 1.69 39	14 .29 7	29 .82 19	94.0 1.52 35	.00	--	337 265	190 108	0.4	T			
06/18/74 1420	5050 48N/01W-36A01	M 81.0F 27.2C	8.4 8.0	340 337	6.2 .31 9	2.6 .21 6	60 2.61 75	13 .33 10	0 .00	190 3.11 90	1.2 .02 1	8.2 .23 7	5.6 .09 3	.20	--	222 190	26 0	5.1				
1-04		SHASTA VALLEY																				
07/01/74 0835	5050 42N/05W-20F01	M 67.0F 19.4C	6.8 7.5	700 706	23 1.15 14	57 4.69 59	49 2.13 27	1.5 .04	0 .00	413 6.77 85	12 .25 3	31 .87 11	2.2 .04 1	2.00	--	400 381	293 0	1.2				
07/01/74 0815	5050 42N/05W-20J01	M 60.0F 15.5C	6.8	335	--	--	--	--	--	--	--	--	--	--	--	--	--	--				

TABLE E-1 cont'

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER					MILLIEQUIVALENTS PER LITER					MILLIGRAMS PER LITER					REM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	R	F	TDS SUM	TH NCH	SAR							
																			PERCENT	REACTANCE	VALUE	SI02	NO3		
1-84 NORTH COASTAL REGION SHASTA VALLEY																									
07/01/74 0930	5050	42N/06W-10J01	M	65.0F 18.3C	7.4	500	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
07/01/74 1445	5050	43N/04W-07M01	M	70.0F 21.1C	6.8	2500	64 11	195 16.04 56	216 9.40 33	6.0 .15 1	0 .00	1260 20.65 72	3.6 .07	275 7.76 27	1.5 .02	5.80	--	1350 1386	963 0	3.0					
07/01/74 1225	5050	43N/05W-02C01	M	53.0F 11.7C	6.3	224	13 .65 27	12 .99 41	17 .74 30	1.9 .05 2	0 .00	122 2.00 84	4.4 .09 4	9.4 .27 11	.9 .01	.10	--	154 119	81 0	0.8 T					
07/01/74 1015	5050	43N/06W-15L01	M	56.0F 13.3C	7.3	615	--	--	--	--	--	--	--	10 .28	--	--	--	--	--	302					
07/01/74 0955	5050	43N/06W-21R01	M	60.0F 15.5C	7.3	480	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
07/01/74 1100	5050	44N/05W-32C03	M	65.0F 18.3C	7.3	1020	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
07/01/74 1530	5050	44N/06W-15C01	M	74.0F 23.3C	7.6	590	--	--	--	--	--	--	--	27 .76	17.0 .27	--	--	--	--	280					
07/01/74 1040	5050	44N/06W-22K01	M	65.0F 18.3C	7.0	440	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
07/01/74 1635	5050	45N/05W-06E01	M	62.0F 16.7C	8.4	1000	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
07/01/74 1555	5050	45N/06W-19E01	M	67.0F 19.4C	7.7	360	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
07/01/74 1610	5050	45N/06W-22R01	M	64.0F 17.8C	8.3	500	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
07/01/74 1550	5050	45N/06W-27D02	M	60.0F 15.5C	8.3	580	--	--	--	--	--	--	--	20 .56	54.0 .87	--	--	--	--	225					
07/01/74 1710	5050	45N/06W-30E01	M	86.0F 30.0C	7.4	445	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
1-85 SCOTT RIVER VALLEY																									
07/02/74 1225	5050	42N/09W-02B01	M	56.0F 13.3C	7.2	560	--	--	--	--	--	--	--	9.8 .28	--	--	--	--	--	293					
07/02/74 0715	5050	42N/09W-27K01	M	63.0F 17.2C	6.5	63	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
07/02/74 0755	5050	42N/09W-29A02	M	57.0F 13.9C	6.9	155	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
07/02/74 1045	5050	43N/09W-02G01	M	62.0F 16.7C	7.3	410	46 49	26 2.14 46	4.4 .19 4	1.2 .03 1	0 .00	250 4.10 90	17 .35 8	2.0 .06 1	3.7 .06 1	.00	--	196 223	220 17	0.1					
07/02/74 0945	5050	43N/09W-08F01	M	58.0F 14.4C	6.3	115	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
07/01/74 1005	5050	43N/09W-08H01	M	59.0F 15.0C	6.8	125	--	--	--	--	--	--	--	1.0 .03	--	--	--	--	--	53					
07/02/74 1205	5050	43N/09W-24F02	M	56.0F 13.3C	7.1	440	--	--	--	--	--	--	--	--	--	--	--	--	--	--					

TABLE E-1 cont
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER										MILLIGRAMS PER LITER					REM					
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	H	F	TDS SUM	TH NCH	SAR							
1-05		NORTH COASTAL REGION SCOTT RIVER VALLEY																							
07/02/74 0800	5050	43N/09W-29G02 M 77.0F 25.0C	7.7	85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/02/74 0840	5050	43N/10W-11E01 M 58.0F 14.4C	6.8	63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/02/74 1145	5050 5050	44N/08W-33E01 M 57.0F 13.9C	6.8 7.5	600 613	52 2.54 38	47 3.87 57	6.8 .30 4	.7 .02 0	0 .60 80	321 5.26 80	29 .60 9	6.8 .19 3	35.0 .56 8	.20 --	--	--	391 335	325 60	0.2	--	--	--	--	--	--
07/02/74 1055	5050 5050	44N/09W-34R01 M 73.0F 22.8C	6.8	295 298	--	--	--	--	--	--	--	2.7 .08	12.0 .19	--	--	--	--	146	--	--	--	--	--	--	--
1-06		MAYFORK VALLEY																							
06/13/74 1245	5050	31N/12W-12L01 M 66.0F 18.9C	6.1	175	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/13/74 1246	5105	66.0F 18.9C	6.1	175	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/13/74 1225	5050	31N/12W-15K01 M 57.0F 13.9C	6.8	325	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/13/74 1225	5050 5050	57.0F 13.9C	6.8 8.4	325 301	30 1.50 45	16 1.32 39	12 .52 16	.3 .01 0	4.0 .13 4	168 2.75 78	15 .31 9	11 .31 9	.8 .01	.00 --	--	--	174 172	143 0	0.4	--	--	--	--	--	--
1-08		MAD RIVER VALLEY																							
09/05/74 1110	5050	05N/01E-04H04 H 61.0F 16.1C	7.9	470	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/74 0940	5050 5050	06N/01E-07M01 H 60.0F 15.5C	6.3 8.5	520 541	--	--	18 .78 14	--	6.0 .20	274 4.49	--	28 .79	--	--	--	--	--	242	0.5	--	--	--	--	--	--
09/05/74 0855	5050	06N/01E-08H01 H 58.0F 14.4C	5.9	180	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/74 1045	5050 5050	06N/01E-19Q01 H 58.0F 14.4C	7.7	365 386	--	--	--	--	--	--	--	11 .31	--	--	--	--	--	176	--	--	--	--	--	--	--
09/05/74 1025	5050	06N/01E-30N01 H 58.0F 14.4C	7.2	365	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/74 1010	5050	06N/01E-32F01 H 64.0F 17.8C	7.6	700	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/74 0835	5050	06N/01W-01H01 H 56.0F 13.3C	6.1	205	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-09		EUREKA PL4IN																							
09/05/74 1510	5050 5050	05N/01E-18Q01 H 62.0F 16.7C	7.3	815 838	--	--	--	--	--	--	--	98 2.76	--	1.40	--	--	--	108	--	--	--	--	--	--	--
09/05/74 1455	5050	05N/01E-20Q01 H 56.0F 13.3C	6.3	295	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/74 1315	5050	04N/01W-08P01 H 56.0F 13.3C	7.7	170	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/74 1330	5050	04N/01W-17B01 H 56.0F 13.3C	6.9	190	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1 cont
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER										MILLIGRAMS PER LITER					REM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	PERCENT REACTANCE VALUE	g	F	TDS SUM	TH NCH	SAR	
1 NORTH COASTAL REGION																				
1-09 EUREKA PLAIN																				
09/06/74	5050	60.0F	6.5	290	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1210		15.5C																		
1-10 EEL RIVER VALLEY																				
09/06/74	5050	56.0F	6.7	570	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1000		14.4C																		
09/06/74	5050	64.0F	6.3	160	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1100		17.8C																		
09/06/74	5050	60.0F	7.3	475	--	--	--	--	--	--	--	16	3.8	--	--	--	--	92		
1045	5350	15.5C	484									.45	.06							
09/06/74	5050	56.0F	6.5	580	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
0750		13.3C																		
09/06/74	5050	56.0F	6.5	4800	--	--	--	--	--	--	--	14.70	--	.10	--	--	1600			
1030	5050	13.3C	4840									41.45								
09/06/74	5050	56.0F	6.7	650	24	28	76	13	0	312	30	46	5.8	.10	--	387	176			
0825	5050	13.3C	8.0	698	1.20	2.30	3.31	.33	.00	5.11	.62	1.30	.09	--	376	0	2.5			
					17	32	46	5		72	9	18	1							
1-11 ROUND VALLEY																				
08/20/74	5050	60.0F	7.2	400	41	21	16	.7	0	254	.5	2.4	2.8	.10	--	234	187			
1025	5050	15.5C	8.1	401	2.05	1.73	.70	.02	.00	4.16	.01	.07	.05	--	209	0	0.5			
					46	38	16			97		2	1							
08/20/74	5050	60.0F	6.9	380	29	41	14	.6	0	280	28	4.3	2.2	.00	--	272	240		X	
1110	5050	15.5C	8.3	486	1.45	3.37	.61	.02	.00	4.59	.58	.12	.04	--	257	12	0.4			
					27	62	11			86	11	2	1							
08/20/74	5050	60.0F	7.3	225	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1020		15.5C																		
08/20/74	5050	76.0F	6.3	165	12	12	5.0	.2	0	105	1.6	1.9	1.5	.00	--	116	81			
1045	5050	24.4C	8.3	173	.60	.99	.22	.01	.00	1.72	.03	.05	.02	--	86	0	0.2		7	
					33	54	12			95	2	3	1							
08/20/74	5050	67.0F	7.2	585	66	29	29	.7	0	408	.5	1.4	3.6	.10	--	355	286			
0910	5050	19.4C	8.0	615	3.29	2.38	1.76	.02	.00	6.69	.01	.04	.06	--	331	0	0.7			
					47	34	18			98		1	1							
08/20/74	5050	60.0F	7.4	255	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
0935		15.5C																		
08/20/74	5050	62.0F	6.8	260	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
0950		16.7C																		
1-12 LAYTONVILLE VALLEY																				
08/20/74	5050	68.0F	7.2	440	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1340		20.0C																		
08/20/74	5050	66.0F	5.7	60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1350		18.9C																		
1-13 LITTLE LAKE VALLEY																				
08/20/74	5050	63.0F	6.3	230	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1445		17.2C																		
08/20/74	5050	59.0F	6.5	220	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1520		15.0C																		

Appendix F, "Waste Water Data", which appeared in certain volumes of the Bulletin No. 130 series, has been discontinued. For information regarding waste water, the reader is referred to the recently reactivated Bulletin No. 68 series: "Inventory of Waste Water Production and Waste Water Reclamation Practices in California".

